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ORIGINAL

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WEST WATER AND WASTEWATER DISTRICTS.	**DOCKET NOS. WS-01303A-02-0867** **WS-01303A-02-0868** **W-01303A-02-0869** **WS-01303A-02-0870** **W-01303A-02-0908** **(CONSOLIDATED)**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WATER AND WASTEWATER DISTRICTS.	**ARIZONA-AMERICAN WATER COMPANY'S MOTION TO SUPPLEMENT THE RECORD TO INCLUDE ILLUSTRATIVE SCHEDULES ON INVERTED-BLOCK RATE DESIGN**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER AND HAVASU WATER DISTRICTS.	

Arizona Corporation Commission
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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.

Arizona-American Water Company ("the Company") hereby moves for an order allowing it to supplement the record in the above-entitled consolidated rate proceeding for the limited purpose of submitting schedules illustrating the Company's proposed conservation-oriented rate design for each of the seven water districts, discussed in its Closing Brief. These schedules were previously provided to Staff and the other parties, along with a description of the rate design, on January 27, 2004.

In summary, the Company believes that it is unnecessary to address the rate design for its water districts in this proceeding. Four of those districts, Sun City, Sun City West, Agua Fria and Tubac, already have a two-tier inverted-block rate design in place. Because of the number of water and wastewater districts involved and the complexity of this proceeding, the Company has proposed to spread any rate increases evenly over the existing rate design, as opposed to making any significant modifications to the rate design at this time. The Company believes that the issue of whether the water districts' rate design should be modified is better addressed in a future proceeding. All of the parties have agreed with the Company on this point, except for Staff.

On the first day of the hearing on the Company's rate applications, however, Commissioner Mundell criticized the Company for not proposing an alternative form of inverted-block rate design. *See* TR at 28-34. Accordingly, following the completion of the hearing, the Company developed, as an alternative to Staff's proposed rate design, an inverted-block rate design for each water district. That rate design is discussed in the Company's Closing Brief, filed concurrently with this motion. The schedules that the Company seeks to include in the record were prepared by its rate design witness, Mr. Ronald L. Kozoman. These schedules are based on the Company's rejoinder revenue requirement and are intended to illustrate the effect of the Company's alternative proposal.

Under these circumstances, the Company's submits that it should be allowed to

supplement the record to include these schedules. In submitting these schedules, however, the Company does not amend or modify its pending rate applications in any material respect, nor does the Company believe it is necessary to delay a final decision by the Commission. Rather, as discussed above and in the Company's Closing Brief, the intent of submitting these illustrative schedules is to show that it is possible to design conservation-oriented rates that are specifically tailored to each water district and customer class.

RESPECTFULLY SUBMITTED this 4th day of February, 2004.

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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WEST WATER AND WASTEWATER DISTRICTS.	**DOCKET NOS. WS-01303A-02-0867** **WS-01303A-02-0868** **W-01303A-02-0869** **WS-01303A-02-0870** **W-01303A-02-0908** **(CONSOLIDATED)**
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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER AND HAVASU WATER DISTRICTS.	

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TABLE OF CONTENTS

TABLE OF CONTENTS
(continued)

TABLE OF CONTENTS
(continued)

I. INTRODUCTION AND SUMMARY.

A. Overview of Application Including Identification of Systems and Discussion of Present Rates.

Arizona-American Water Company ("Arizona-American" or "the Company") has applied for a determination of the fair value of its utility plant and property and for increases in its rates and charges for utility service. The Company's applications cover 10 water and wastewater districts, and seek rate adjustments based on the fair value rate bases and operating results in those districts utilizing a 12-month test period ending December 31, 2001, with appropriate pro forma adjustments to annualize and normalize rate base, revenues and expenses on a going-forward basis. The water and wastewater districts involved in this proceeding and the revenue increase (decrease) sought by Arizona-American, for each of them, are as follows:

District	Revenue Increase	Percent Change
Agua Fria Water	$ 62,372	1.01%
Anthem Water	($ 11,688)	-0.32%
Anthem/Agua Fria Wastewater	$ 311,419	16.71%
Sun City Water	$ 4,453,775	71.92%
Sun City Wastewater	$ 260,879	5.13%
Sun City West Water	$ 1,156,931	34.22%
Sun City West Wastewater	$ 1,565,307	44.27%
Mohave Water	$ 142,344	3.24%
Havasu Water	$ 124,760	28.11%
Tubac Water	$ 181,931	71.49%

Bourassa Rj. (Ex. A-24), Schedules A-1. *See also id.*, Rebuttal Exhibit 1 (Summary of Company, Staff and RUCO recommended increases).

Mr. Stephenson explains in his direct testimony that these districts were previously

owned and operated by Citizens Communications Company ("Citizens"), and were acquired by Arizona-American on January 15, 2002.[1] The Commission approved the sale and transfer of the Citizens' water and wastewater utility plant, property and assets in Arizona, including the transfer of Citizens certificates of convenience and necessity, to Arizona-American in Decision No. 63584 (April 24, 2001). A copy of this decision is attached to Mr. Stephenson's Direct Testimony (Exs. A-64) as Exhibit 1.

Later in 2001, the Commission authorized Arizona-American's debt financing for the purchase of Citizens' water and wastewater assets in Decision No. 64002 (Aug. 30, 2001). The Commission authorized Arizona-American to issue promissory notes and other evidence of indebtedness in an amount not to exceed $180 million and to issue a promissory note reflecting the obligation associated with assuming certain industrial development revenue bonds issued by Citizens in the amount of $10,635,000. The balance of the purchase price was financed by an infusion of paid-in equity capital from AWW.[2] The final purchase price paid by Arizona-American was approximately $276,500,000. As explained by Mr. Stephenson, the terms and conditions relating to the purchase price and the terms of the transaction generally were the result of arms-length negotiation between two independent and sophisticated utilities, Citizens and AWW. Stephenson Dt. (Ex. A-64) at 8-10.

None of the former Citizens' districts received any recent rate increases. Citizens' Agua Fria Water Division, Sun City Water Company, Sun City Sewer Company, Sun City

[1] A small wastewater district located in Mohave County, formerly known as Sorenson Utility Company, was also acquired by Arizona-American. This wastewater district is not involved in the rate applications, nor is the Paradise Valley water district, which has been owned and operated by Arizona-American since the late 1960s. Both of these districts received rate increases within the past five years.

[2] In Decision No. 64002, the Commission ordered Arizona-American to increase its equity by at least $0.69 for each dollar of acquisition debt in order to maintain a reasonably balanced capital structure. Thus, the acquisition was financed by a mixture of debt and equity.

West Utilities Company and Tubac Valley Water Company's last rate orders were issued in May 1997 based on test periods ending March 31, 1995. Decision No. 60172 (May 7, 1997).[3] Citizens' Mohave Water Division last received rate increases in February 1990, based on a test period ending March 31, 1988. Decision No. 56806 (Feb. 1, 1990). Likewise, Havasu Water Company last received rate increases in February 1992, based on a test period ending December 31, 1990. Decision No. 57743 (Feb. 21, 1992). As Mr. Stephenson explains, it appears that once Citizens decided to sell its water and wastewater assets in 1999, it elected not to seek rate increases and, in some cases, to accept operating losses. Stephenson Dt. (Ex. A-64) at 5-6. Mr. Stephenson states that a delay in obtaining rate increases and correcting the districts' anemic earnings would be harmful to the Company and, ultimately, to its customers. *Id.*[4]

B. <u>The Methodology Employed by the Company</u>.

The Company's applications, including proposed pro forma adjustments to rate base, revenue and operating expenses, are consistent with generally accepted ratemaking principles as well as prior decisions and the rules and regulations of the Commission. The Company has used an historic test year consisting of the 12-month period ending December 31, 2001, in determining its rate base, operating income and rate of return as required by A.A.C. R14-2-103, with pro forma adjustments to the test year financial data and results based on known and measurable changes.

The Commission's regulation defining the filing requirements in support of a proposed increase in rates and charges for service specifically contemplates adjustments

[3] In this decision, Sun City Water Company and Sun City West Utilities' rates for water service were actually reduced.

[4] In addition, Arizona-American was required to file for rate review for the Anthem water and wastewater districts by 2004 or, if earlier, when the number of equivalent residential units in Anthem reached 3,500. Decision No. 60975 (June 19, 1998). Also, in Decision No. 63584 (Dec. 12, 2002), the Commission imposed a 3-year moratorium on rate applications by Arizona-American in the absence of an emergency. The instant rate applications were filed before the 3-year moratorium went into effect.

of this nature. For example, the term "pro forma adjustments" is defined as:

> Adjustments to actual test year results and balances to obtain a normal or more realistic relationship between revenues, expenses and rate base.

A.A.C. R14-2-103(A)(3)(i). Similarly, the definitions of "original cost rate base" and "reconstructed cost new depreciated (RCND) rate base" both require that the rate base be adjusted to include "all applicable pro forma adjustments." A.A.C. R14-2-103(A)(3)(h) and (n). The illustrative schedules found in the appendix of the Commission's regulation also indicate that both the rate base and income statement should include pro forma adjustments. A.A.C. R14-2-103, Appendix B (rate base schedules) and Appendix C (test year income statements).

While the starting point of a permanent rate application is the utility's actual, recorded results during the test year, it is axiomatic that those results must be adjusted to obtain a normal and more realistic relationship between rate base, revenue and expenses that will be representative of the period when the new rates go into effect. The use of an historic test year assumes that the operating relationship will be maintained for several (or more) years into the future, i.e., the time period during which new rates will be in effect. In this case, for example, the Company's new rates will become effective in Spring 2004, and will remain in effect during 2004 and 2005, if not longer. Consequently, adjustments to actual test year results are routinely made as part of the ratemaking process. *Id.*

II. RATE BASE ISSUES.

A. Arizona's Constitution Requires the Commission to Establish Rates Based on Fair Value.

Arizona's Constitution requires the Commission to "ascertain the fair value of the property" of all public service corporations as part of the rate setting process. Ariz. Const. art. 15 § 14. When the Constitution was adopted in 1912, the term "fair value" had a definite meaning in the context of utility rate-making. Only a few years earlier the U.S.

Supreme Court had set forth the basic tenets of the fair value standard:

> [T]he basis of all calculations as to the reasonableness of rates to be charged . . . must be the fair value of the property being used . . . for the convenience of the public. And, in order to ascertain that value, the original cost of construction, the amount expended in permanent improvements, the amount and market value of its bonds and stock, the present as compared with the original cost of construction, the probable earning capacity of the property under particular rates prescribed by statute, and the sum required to meet operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case. We do not say that there may not be other matters to be regarded in estimating the value of the property. What the company is entitled to ask for is a fair return upon the value of what it employs for the public convenience.

Smyth v. Ames, 169 US 466, 546-47 (1898). In other words, a utility's authorized rates must be based on the value of the property dedicated to serving the public, and the valuation must be derived from "a proper consideration of all relevant facts." *Minnesota Rate Cases*, 230 U.S. 352, 434-35 (1913).

Arizona courts have been absolutely clear in requiring the Commission to base its rate decisions on fair value and not on the "prudent investment" standard used in other states. The Arizona Supreme Court has held that "under our constitution the Corporation Commission must find the fair value of the properties devoted to the public use, and that in determining the fair value the Commission cannot be guided by the prudent investment theory . . . ." *Arizona Corp. Comm'n v. Arizona Water Co.*, 85 Ariz. 198, 203, 335 P.2d 412, 415 (1959), *citing Simms v. Round Valley Light & Power Co.*, 80 Ariz. 145, 294 P.2d 378 (1956). As recently as 2001, the Arizona Supreme Court reaffirmed that in a monopoly setting, fair value is the "exclusive rate base" on which utility companies are entitled to a fair rate of return. *US West Communications, Inc. v. Arizona Corp. Comm'n*, 201 Ariz. 242, 245-46 ¶¶ 13, 16-19, 34 P.3d 351, 354-55 (2001). *See also Arizona Corp. Comm'n v. Arizona Public Serv. Co.*, 113 Ariz. 368, 370, 555, P.2d 326, 328 (1976).

The evidence presented by Staff and RUCO clearly shows that both are advocating

a prudent investment methodology in direct violation of Arizona law. In fact, Staff and RUCO argue that Arizona's constitutionally mandated fair value standard has been replaced with a procedure modeled on the prudent investment standard. Although it is claimed that this procedure has been in place for some time, it is nevertheless unlawful and beyond the powers granted to the Commission by the Arizona Constitution. As the Arizona Supreme Court held in the *US West* case:

> Should they think it wise, our citizens are free to amend the Arizona Constitution . . . . It is noteworthy, however, that the people have rejected such an amendment three times, most recently just a year ago. Because neither this Court nor the corporation commission possesses the power to ignore plain constitutional language, we hold that a determination of fair value is necessary with respect to a public service corporation.

Id. at 245, ¶ 12, 34 P.3d at 354.

As discussed below, the fair value standard contrasts with the prudent investment standard in three important ways. First, the fair value standard is based on the *value* of the property, while the prudent investment standard is based on its *cost*. Second, a fair value rate base is based on the value determined *at the time rates are set*, while the prudent investment rate base is derived from the amount originally invested when the property was first devoted to public service, i.e., the original cost of the property. Third, because utilities under the fair value system are entitled to a return on the current value of property rather than on the capital invested, the utility will be entitled to a greater return when the value of property increases, but will also bear the risk that the value of its property may decrease.

1. A Determination of Fair Value Must Be Based on the Actual Value of the Property Employed in Providing Utility Service to the Public, While a Prudent Investment Rate Base Is Derived from the Capital Invested in the Enterprise.

As the supreme court of another state employing the fair value standard has

described it,

> [T]he concept of fair value holds that it is the value of the utility's property devoted to public service upon which the reasonable rate must be returned. It is a Value concept and not a Cost concept. Stated briefly, a cost rate base reflects the amount of invested capital, whereas a value rate base reflects the value of the assets which the utility has devoted to serving the public.

Union Elec. Co. v. Illinois Comm. Comm'n, 396 N.E.2d 510, 516 (Ill. 1979). In a leading case decided under the fair value standard and still cited today, the U.S. Supreme Court overturned a state commission decision based on an original cost methodology similar to the method Staff and RUCO advocate here. *Bluefield Waterworks & Improvement Co. v. Public Serv. Comm'n of W. Va.*, 262 U.S. 679, 689-92 (1923). The Court held that the West Virginia Commission's valuation, which had been "arrived at substantially on the basis of actual cost, less depreciation," did not meet the fair value standard because it "resulted in a valuation considerably and materially less than would have been reached" if the commission had considered the effect of recent construction cost increases on the value of the company's property. *Id.* at 692.

By contrast, just a year earlier in *Southwestern Bell Telephone Co. v. Public Service Comm'n of Mo.*, 262 U.S. 276 (1922), Justice Brandeis outlined "what has become known as the 'prudent investment' or 'historical cost' rule. He . . . concluded that what was 'taken' by public utility regulation is not specific physical assets that are to be individually valued, but the capital prudently devoted to the public utility enterprise by the utilities' owners." *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 309 (1989). "It is this prudent investment theory of Mr. Justice Brandeis which has fathered what is now commonly referred to as the 'original cost' method of computing the rate base upon which a reasonable return is to be allowed." *Union Elec.*, 396 N.E.2d at 513. Justice Brandeis favored this method for a number of reasons, especially because he believed that "it is essential that the rate base be definite, stable, and readily ascertainable, and that the

percentage earned on the rate base be measured by the cost, or charge, of the capital employed in the enterprise." *Southwestern Bell*, 262 U.S. 276, 292 (1923) (Brandeis, J. concurring).

In 1944, the U.S. Supreme Court ended its practice of closely reviewing rate-setting methodology under the fair value standard by adopting much of Justice Brandeis' reasoning. *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944). The Court held that rates established under the prudent investment rule were constitutionally permissible, "even though they might produce only a meager return on the so-called 'fair value' rate base." *Id.* at 605. "If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry . . . is at an end. The fact that the method employed to reach that result may contain infirmities is not then important." *Id.* at 602.

Arizona courts have since made it clear, however, that the *Hope* Court's refusal to employ the fair value method does not change the express language of Article 15, Section 14 of the Arizona Constitution. "Under the law of fair value a utility is not entitled to a fair return on its investment; it is entitled to a fair return on the fair value of its properties devoted to the public use, no more and no less." *Arizona Water*, 85 Ariz. at 203, 335 P.2d at 415. "The *Hope* case cannot be used by the commission. To do so would violate our constitution." *Simms*, 80 Ariz. at 151, 294 P.2d at 382. Regardless of whether RUCO and the Commission Staff agree with Justice Brandeis' policy arguments, the Arizona Constitution requires the Commission to use the fair value method, not the prudent investment method, in setting rates in Arizona.

Despite this clear precedent, the testimony in this case shows that Staff and RUCO base their recommendations on historic cost rather than current value. For example, RUCO witness William Rigsby testified that it is "the Commission's practice" to apply "the authorized rate of return to the original cost of a utility's rate base (which produces a level of operating income that is based on the amount of actual dollars invested)." Rigsby

Sb. (Ex. R-6) at 14-15. Staff witness Darron Carlson also testified that Staff's "calculation for return is on original cost." TR at 1501. RUCO witness Marylee Diaz-Cortez testified that, based on her experience in Commission proceedings, the Commission always bases a utility's revenue requirement on the original cost rate base, and does not allow the revenue requirement to vary when RCND or other evidence of value is admitted. TR at 723-24, 854-55.

2. Under the Fair Value Standard, the Property Must Be Valued at the Time the Rate Base Is Fixed, While the Prudent Investment Rate Base Is Derived from the Historic Cost of the Original Investment.

Again, the distinction between fair value and prudent investment is plain: "Fair value means the value of properties at the time of inquiry whereas prudent investment relates to a value at the time of investment." *Simms*, 80 Ariz. at 151, 294 P.2d at 382 (internal citation omitted). *See also Consolidated Water Utilities, Ltd., v. Arizona Corp. Comm'n*, 178 Ariz. 478, 482 n. 6, 875 P.2d 137, 141 n. 6 (App. 1993) ("The fair value rate base is the fair value of the company's properties within the state at the time the rate is fixed."); *Bonbright v. Geary*, 210 F. 44, 48 (D. Ariz. 1913) ("There must be a fair return upon the reasonable value of the property at the time it is being used for the public."), *quoting San Diego Land & Town Co. v. City of National City*, 174 U.S. 739, 757 (1899); *Southwestern Bell*, 262 U.S. at 286 ("[T]he value of the property is to be determined at the time when the inquiry is made regarding the rates."); *Willcox v. Consolidated Gas Co.*, 212 U.S. 19, 52 (1909) ("the value of the property is to be determined as of the time when the inquiry is made regarding the rates"). For this reason, the fair value standard "allows the increase or decrease in the cost of construction to influence the rates . . . ." *Simms*, 80 Ariz. at 151, 294 P.2d at 382.

By contrast, Justice Brandeis summarized the prudent investment approach as follows:

> Original cost is the amount actually paid to establish the utility. . . . Historical cost, on the other hand, is the amount which normally should have been paid for all the property which is usefully devoted to the public service. It is, in effect, what is termed the prudent investment. In enterprises efficiently launched and developed, historical cost and original cost would practically coincide . . . .

Southwestern Bell, 262 U.S. at 292 (Brandeis, J. concurring). Again, it is absolutely clear from the testimony that the original cost method on which Staff and RUCO primarily rely is a prudent investment method, not a fair value method. For example, Ms. Diaz-Cortez testified that "a utility is entitled to a fair rate of return on the original cost of its rate base assets *when first devoted to public service*." TR at 823 (emphasis added). Similarly, Mr. Carlson testified that Arizona-American is only entitled to recover a return on original cost, not on current value. TR at 1513-14.

3. A Fair Value Standard Reflects Many of the Ordinary Risks and Rewards of Property Ownership, While a Prudent Investment Standard Is Designed to Protect Capital Investment.

Under a fair value standard, a utility may benefit from increases in the value of property devoted to public service, but the utility also bears the risk of obsolescence or other loss of property value.

> Under the fair value approach, a "company is entitled to ask for . . . a fair return on the value of that which it employs for the public convenience," while on the other hand, "the public is entitled to demand . . . that no more be exacted from it than the use of [utility property] than the services rendered by it are reasonably worth." [*Smyth v. Ames*,] 169 U.S. [466,] 547, 18 S. Ct. [418,] 434. In theory the *Smyth v. Ames* fair value standard mimics the operation of the competitive market. To the extent the utilities' investments in plants are good ones (because the benefits exceed their costs) they are rewarded with an opportunity to earn an "above cost" return, that is, a fair return on the current "market value" of the plant. To the extent the utilities' investments turn out to be bad ones (such as plants that are canceled and so never used and useful to the public), the utilities suffer because the investments have no

fair value and so justify no return.

Duquesne, 488 U.S. at 308-09. *See also Bluefield*, 262 U.S. at 690 ("If the property, which legally enters into the consideration of the question of rates, has increased in value since it was acquired, the company is entitled to the benefit of such increase."), *quoting Willcox,* 212 U.S. at 52 (1909); *Minnesota Rate Cases*, 230 U.S. at 454 (Because "the company may not be protected in its actual investment, if the value of its property be plainly less, so the making of a just return for the use of the property involves the recognition of its fair value if it be more than its cost."). Arizona courts have similarly recognized that inflation and other factors can influence the fair value rate base: "[B]ecause of mechanical advances the existing plant carries a possible element of obsolescence. This certainly is a matter the Commission would have the right to consider in arriving at present fair value." *Simms*, 80 Ariz. at 155, 294 P.2d at 385.

The prudent investment standard is much different. "Under the prudent investment rule, the utility is compensated for all prudent investments at their actual cost when made (their 'historical' cost) irrespective of whether individual investments are deemed necessary or beneficial in hindsight." *Duquesne Light*, 488 U.S. at 309. "The utilities incur fewer risks, but are limited to a standard rate of return on the actual amount of money reasonably invested." *Id.* Again, Staff's testimony shows that Staff was relying on a prudent investment approach to arrive at its recommendations. Staff witness Joel Reiker testified that an original cost rate base must be used in order to provide "the correct earnings" and avoid any risk of "windfall" gains or losses based on changes in the value of the property. Reiker Dt. (Ex. S-45) at 63-64. Even if the Commission shares Mr. Reiker's policy preferences (which, as the Arizona Supreme Court noted in *US West*, Arizona voters have consistently rejected), the Commission does not have the authority to jettison the constitutionally mandated fair value approach in favor of a prudent investment approach.

RUCO's claim that allowing for an increase in the value of property would create a "double recovery" for the utility is similarly based on the prudent investment standard rather than on the fair value standard. Ms. Diaz-Cortez explained RUCO's double recovery theory by pointing out that a market rate of return in any given year may be affected by the inflation rate during that year. TR at 818. Ms. Diaz-Cortez went on to explain that, under her theory of ratemaking, when a utility company receives a market-based return on investment in one year, the company must be precluded from ever receiving any compensation for the increased value of its property in any future year. *Id.* This is very different from the way property ownership works outside the prudent investment regulatory context. An ordinary property owner expects to earn a market return on commercial property each and every year, and the return is expected to increase as the value of the property increases. This is the "competitive market" return on the present value of property that the fair value approach is intended to mimic. *Duquesne*, 488 U.S. at 308-09.

Nevertheless, it is clear from the testimony that RUCO and Staff believe, apparently for policy reasons, that a utility should not under any circumstances be permitted to earn more than it would earn under a prudent investment regime. Ms. Diaz-Cortez stated that allowing a utility to earn a reasonable return on the fair value of its property "flies in the face of what from a theoretical standpoint we try to accomplish in utility regulation . . . which is based on the theory that a utility is entitled to a fair rate of return on the *original cost* of its rate base assets *when first devoted to public use*." TR at 823 (emphasis supplied). No clearer description of the prudent investment rule is possible.[5] RUCO and Staff simply refuse to accept the unambiguous and repeated

[5] The witnesses for the Town of Youngstown similarly have argued for the use of the prudent investment method. *E.g.*, Burton Dt. (Ex. Y-5) at 9 ("Use of any [fair value rate base] greater than the OCRB causes the ratepayers to provide a return on dollars that were not actually expended on property devoted to a public purpose.")

holdings of the Arizona Supreme Court that utility companies are entitled to earn a reasonable return based on the current value of property dedicated to public service, whether the value of the property is greater or less than the original investment. *See, e.g.*, *Arizona Water*, 85 Ariz. at 203, 335 P.2d at 415; *Simms*, 80 Ariz. at 151, 294 P.2d at 382.

4. The Fair Value Concept Is Based on a Constitutional Takings Analysis.

The concept of fair value contained in the Arizona Constitution is based on the takings clause of the U.S. Constitution as interpreted at the time of statehood. "[I]f the valuation of any one of the necessary elements of the public service plant is fixed by the rate-making authorities at an amount unjustly and unreasonably low . . . such unreasonable and unjust valuation or omission of valuation is the taking of private property for a public use without just compensation." *Bonbright*, 210 F. at 48 (D. Ariz. 1913). The fair value standard recognizes that the property devoted to utility service "is held in private ownership, and it is that property, and not the original cost of it, of which the owner may not be deprived without due process of law." *Bluefield Waterworks*, 262 U.S. at 691, *quoting Minnesota Rate Cases*, 230 U.S. at 454. *See also Arizona Water*, 85 Ariz. at 200, 335 P.2d at 413 (holding that failure to determine fair value and provide for a fair return on property employed is a taking without due process of law). This reasoning is no less applicable today. "If the rate does not afford sufficient compensation, the State has taken the use of utility property without paying just compensation, and so violated the Fifth and Fourteenth Amendments." *Duquesne Light*, 488 U.S. at 308.

5. Staff and RUCO Cannot Avoid the Constitutionally-Mandated Fair Value Determination by Manipulating the Allowable Rate of Return.

It is clear from the testimony offered by RUCO and Staff that Staff has made a regular practice of calculating the revenue requirement by applying the rate of return to an original cost rate base, and then adjusting the rate of return to produce the same revenue

requirement, even when evidence of fair value has been provided. This practice directly violates the constitutional requirement that Arizona utilities be allowed to earn a reasonable return on the fair value of their property rather than on the capital originally invested. In the recent *US West* decision, the Arizona Supreme Court explained:

> Because neither this court nor the corporation commission possesses the power to ignore plain constitutional language, we hold that a determination of fair value is necessary with respect to a public service corporation.
>
> But what is to be done with such a finding? In the past, fair value has been the factor by which a reasonable rate of return was multiplied to yield, with the addition of operating expenses, the total revenue that a corporation could earn. . . . That revenue figure was then used to set rates.

201 Ariz. at 245, ¶¶ 12, 13, 34 P.2d at 354 (citation omitted). In *Scates v. Arizona Corp. Comm'n*, 118 Ariz. 531, 578 P.2d 612 (App. 1978), the Arizona Court of Appeals summarized the rate-making process, including the use of a fair value rate base, as follows:

> The general theory of utility regulation is that the total revenue, including income from rates and charges, should be sufficient to meet a utility's operating costs and to give the utility and its stockholders a reasonable rate of return on the utility's investment. . . . To achieve this, the Commission must first determine the "fair value" of a utility's property and use this value as the utility's rate base. . . . The Commission then must determine what the rate of return should be, and then apply that figure to the rate base in order to establish just and reasonable tariffs.

118 Ariz. At 533-34, 578 P.2d at 614-15, *citing Simms*, 80 Ariz. at 158, 294 P.2d at 303, and *Arizona Public Serv. Co.*, 113 Ariz. at 370, 555 P.2d at 328.

In short, the fair value of the utility's property is the utility's rate base, and the rate of return must be applied to that rate base. "The reasonableness and justness of the rates must be related to this finding of fair value." *Simms*, 80 Ariz. at 151, 294 P.2d at 382.

Despite the unambiguous language of the Arizona Constitution and the similarly

unambiguous holdings of the Arizona courts, the testimony clearly shows that both Staff and RUCO have based their revenue recommendations in this case on the prudent investment standard. For example, Arizona-American's witness Bourassa explained how he believed Staff had "backed into" its calculation of a different allowable rate of return depending on the value of the rate base. TR at 99, 102.

> You will notice . . . that the Staff proposed rate of return of 6.6 percent . . . was applied to original cost rate base, and a revenue requirement for original cost rate base was determined. On that same schedule, the same revenue requirement appears for the fair value rate base as well as the RCND rate base. I can only conclude that the Staff applied its . . . proposed rate of return to original cost rate base, [and] used the resulting revenue requirement for its return on the fair value rate base.

TR at 102. *See also* Bourassa Rj. (Ex. A-24) at 9-11. In other words, Staff "first determined what the company should be allowed to earn . . . and second . . . it proceeded to adjust the rate of return to any rate base." This is clearly improper. *See Simms*, 80 Ariz. at 155, 294 P.2d at 385.

Far from contesting this characterization, RUCO witness Diaz-Cortez agreed, claiming that she had studied Commission rate orders going "back into the sixties and seventies" in order to determine what methods the Commission has historically employed.[6] TR at 724. According to Ms. Diaz-Cortez, Staff first determines the utility company's revenue requirement from the original cost rate base using a market rate of return, and then, after the Company's revenue requirement has been obtained using an original cost rate base, Staff re-calculates the rate of return to produce the same amount of

[6] Arizona-American cannot vouch for Ms. Diaz-Cortez' assertion that this method has been in use since "the sixties," and is not aware of any evidence establishing precisely when (or why) the Commission actually adopted this unlawful method. At the hearing, Staff made a point of questioning witnesses regarding the use of these methods during past rate cases. *See, e.g.*, TR 180-193. Arizona-American does not dispute the fact that the Commission has used this method in the past. The fact that utility companies, including Arizona-American, have chosen not to undertake the considerable risk and expense of challenging the Commission's methods in past rate cases does not make the method constitutional.

revenue no matter what evidence is presented regarding the value of the property in the rate base. *Id.*; *see also* TR at 814-16, 853-55, 857-58.

Staff witness Darron Carlson confirmed that this was the Staff's procedure, and that he had personally performed this calculation. TR at 1499, 1501-05. Remarkably, Mr. Carlson went on to admit that "[t]he RCND on its own . . . sets a value at what the *current value* is on the market." *Id.* at 1513. As noted in the numerous Arizona cases cited above, current value is precisely what Arizona-American is entitled to earn a return on. Nevertheless, Mr. Carlson stated his belief that "the fact is the company paid much less, and the company shouldn't be earning a return on inflated values. The company should be earning a return on its investment. . . . [T]he fact is the company invested according to the *original cost*, and *that's what they earn a return on* . . . ." *Id.* at 1513-14 (emphasis added).[7]

This testimony establishes beyond any reasonable dispute that, under Staff's and RUCO's methodology, the amount the Company will be allowed to earn is absolutely predetermined using a prudent investment method based on original cost. This sort of "backing in" methodology makes the fair value determination an unnecessary and meaningless exercise. As Ms. Diaz-Cortez stated, the only reason the Commission bothers to consider evidence of fair value is because "there's authoritative legal stuff out there that indicates that the Commission shall consider such information when presented by the company. . . . [T]he reason to my understanding that we get fair value is just simply because we have a law that requires it." TR at 831-32. Under these circumstances, it is hardly surprising that "most utility companies do not even submit RCND valuations." Carlson Dt. (Ex. S-47) at 7.

[7] The witnesses for the Town of Youngstown similarly have argued for the use of the prudent investment method. *E.g.*, Burton Dt. (Ex. Y-5) at 9 ("Use of any [fair value rate base] greater than the OCRB causes the ratepayers to provide a return on dollars that were not actually expended on property devoted to a public purpose.")

B. The Company's RCN Rate Bases Should Be Adopted as the Fair Value Rate Bases in This Proceeding.

1. Summary of the Methodology Employed by the Company to Develop Its Reconstruction Cost Rate Bases.

In accordance with Commission rule A.A.C. R14-2-103, which defines the filing requirements to support a request by a public service corporation for determination of the value of its property and of the rate of return thereon, Arizona-American developed and submitted schedules reflecting its original cost rate base ("OCRB") and its reconstruction cost new rate base ("RCRB") for each water and wastewater district. Generally, the same adjustments to the OCRB were made to the RCRB, including adjustments to original cost plant-in-service for post-test year plant, unidentified plant, plant not used to useful, and reversal of an adjustment to Citizens' recorded AFUDC. *See, e.g.,* Bourassa Rb. (Ex. A-21) at 4-7; Bourassa Rj. (Ex. A-24) at 4-8.[8]

In developing its RCRB, Arizona-American's witness Thomas Bourassa prepared a trended reproduction cost new ("RCN") plant-in-service study. In performing this study, Mr. Bourassa employed national Handy-Whitman indexes to determine the trended plant values. *E.g.*, Bourassa Dt. (Ex. A-1) at 6. Accumulated depreciation, advances in aid of construction ("AIAC"), and contributions in aid of construction ("CIAC") were also trended and restated, and deducted from the RCRB, in accordance with applicable Commission rules. *See* A.A.C. R14-2-103(A)(3)(n)(defining "reconstructed cost new (RCND) rate base"). The Company's final position regarding its rate bases for each water and wastewater district is shown on Rejoinder Schedule B-1, attached to Mr. Bourassa's Rejoinder Testimony (Ex. A-24).[9]

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[8] There are several relatively minor areas of disagreement between the parties concerning the adjustments to the OCRB and the RCRB, which are addressed in the next section of this Brief.

[9] Arizona-American has waived the right to include any working capital allowance in its rate base. *E.g.*, Bourassa Direct (Ex. A-1) at 6 (Sun City districts).

With the exception of Staff, the other parties to this proceeding did not challenge the amount of the Company's RCRB for each district or the methodology used by Mr. Bourassa to develop these rate bases. RUCO, for example, has simply argued that the use of an RCND rate base is improper because it would "overstate" the revenue requirement and, consequently, did not consider it in developing its recommended revenues for each district. *E.g.,* Diaz-Cortez Dt. (Ex. R-7) at 8-12. *See also* Burton Dt. (Y-5) at 9. Staff, however, performed its own RCN studies. Bourassa Rb. (Ex. A-21) at 18 and Rebuttal Exhibit 8 (Staff workpapers). Staff's RCN plant value, on a company-wide basis, was approximately $30 million less than the Company's original RCN value. In addition, Staff criticized the initial RCN studies performed by the Company on several different grounds, but rather than proposing adjustments to the Company's RCN values, simply chose to reject them, in its direct filing. *E.g.,* Scott Dt. (Ex. S-38) at 5-7.

In response to Staff's criticisms, the Company retained an independent valuation engineer, William M. Stout. Mr. Stout is a professional engineer and is President of the Valuation and Rate Division of Gannett Fleming, Inc., where he has been employed for 30 years. Stout Rb. (Ex. A-51) at 1-4. Mr. Stout conducted a review of the RCN studies conducted by Staff and by Mr. Bourassa as well as the testimony of the Staff engineering witnesses. *Id.* at 4. Based on Mr. Stout's review and evaluation of the RCN studies and resulting RCRB for each district, the Company revised its RCN plant studies to address Staff's criticisms. Bourassa Rb. (Ex. A-21) at 19.[10]

The Company's revised RCN values total $380.6 million on a company-wide basis, as compared to Staff's RCN values of $379.4 million – a variance of only 0.3%. Bourassa Rb. (Ex. A-21) at Schedule 9 (comparing the results of the two sets of RCN studies). As Mr. Stout testified, there is no material difference between the two sets of values, and both

[10] It should be noted that the Company did not agree with a number of Staff's criticisms. *See, e.g.,* Stout Rb. (A-51) at 7-12. Nevertheless, to avoid further disputes, the Company accepted Staff's corrections.

of them provide a reasonable basis for developing a fair value rate base based on generally accepted valuation techniques. Stout Rb. (Ex. A-51) at 4-6.

In response to the rebuttal testimonies of Mr. Bourassa and Mr. Stout, and the revisions made to the Company's RCN studies, Staff accepted the Company's RCN values. Specifically, the Staff engineering witness testified:

> [T]he Company has addressed the identified problems to the satisfaction of Engineering Staff. Engineering Staff now believes that the adjustments performed by the Company in its rebuttal testimony make the RCN Study a true "valuation study." The Company's RCN values reflect the proper use of specific cost indices and proper use of the Handy-Whitman index and removed unidentified items and items not used and useful. In addition, items such as Organization, Franchises and Land costs were not trended in the Company's RCN values, but were accepted at original cost. In short, the major problems in the RCN values presented by the Company in its direct testimonies have been corrected in its rebuttal testimony.

Scott Sb. (Ex. S-39) at 3. Mr. Scott also testified that Staff accepts the RCN values presented in Rebuttal Exhibit 9, attached to Mr. Bourassa's Rebuttal Testimony. *Id.* at 4.

In short, there is no disagreement between the Company and Staff regarding plant in service and the Company's RCN plant values for each water and wastewater district. Exhibit 2 to Mr. Bourassa's Rejoinder Testimony contains a summary of the Company's requested fair value rate base by district. Although Staff has accepted the Company's RCN study and the resulting RCRB (with certain minor differences attributable to adjustments to accumulated depreciation, discussed below), Staff proposes a fair value rate base based on the average of the RCRB and Staff's OCRB. RUCO, in contrast, proposes that OCRB (excluding any acquisition adjustment) be used as the fair value rate base for each district.

District	Company	Staff	RUCO
Agua Fria	$18,346,919	$17,474,464	$16,228,561
Anthem Water	9,627,995	9,449,190	8,766,964

Anthem/Agua Fria Wastewater	2,789,661	1,761,046	1,904,897
Havasu Water	1,216,964	982,391	794,180
Mohave Water	13,350,302	11,396,966	8,120,368
Sun City Water	44,279,756	32,904,707	22,353,535
Sun City Wastewater	17,192,669	12,956,687	8,929,152
Sun City West Water	15,432,917	13,643,018	11,384,070
Sun City West Wastewater	12,221,084	10,569,243	10,541,392
Tubac	1,732,373	1,431,070	1,173,409
Totals	$136,190,641	$113,568,782	$90,196,528

Bourassa Rj. (Ex. A-24) at 3 and Rejoinder Exhibit 2. As explained below, the Company maintains that the RCRB for each district should be used as the fair value rate base because the RCRB provides a more accurate estimate of the current value of the Company's utility plant and property used to furnish service in each district.

2. The Company's RCN Rate Bases Provide the Best Measure of the Fair Value of the Company's Property.

Apparently, the Commission's typical practice has been to average the utility's OCRB and its RCRB to arrive at a fair value rate base. *See, e.g.,* Ex. S-2 (Decision No. 60172) at 21; Ex. S-4 (Decision No. 56806) at 4; Ex. S-5 (Decision No. 59079) at 10. As these decisions indicate, however, there is normally no disagreement among the parties concerning how the OCRB and the RCRB should be weighted to arrive at an appropriate fair value rate base and, consequently, no reason to deviate from this convenient practice. *Id.* As explained above, the goal of finding and using the fair value of the utility's property as its rate base is to ensure that the rates are set on the basis of the current value of that property or, as the Arizona Supreme Court said in *Simms*, "the value of the properties at the time of inquiry." *Simms*, 80 Ariz. at 151, 292 P.2d at 382. Because the

principal goal of the fair value method of rate-making is to set rates on the basis of the current value of the property devoted to public service, as opposed to that property's historic cost or the utility's investment, averaging the utility's RCRB with its OCRB without a legitimate reason to do so would violate that Arizona Constitution.

> It is well established that values of utility properties fluctuate, and that owners must bear the decline and are entitled to the increase. The decision of this court in *Smyth v. Ames* . . . declares that to ascertain value 'the present as compared with the original cost of construction' are, among other things, matters for consideration. But this does not mean that the original cost or the present cost or some figure arbitrarily chosen between these two is to be taken as the measure. The weight to be given to such cost figures and other items or classes of evidence is to be determined in the light of the facts of the case in hand.

McCardle v. Indianapolis Water Co., 272 U.S. 400, 410 (1926), *citing Smith*, 169 U.S. at 547.

In this case, Staff has provided no justification for averaging the two rate bases, other than claiming it has been done in the past. The Company believes that there are several reasons to use the RCRB for each district in setting rates in this case, as opposed to using an average of OCRB and RCRB as the fair value rate base.

First, the Company's RCRB for each district is extremely conservative and understates the current value of each district's utility plant and property. In determining the RCRB for each district, the Company trended (i.e., increased) the AIAC and CIAC balances and deducted them from the RCRB. *E.g.*, Bourassa Dt. (Ex. A-1) at 7 (Sun City districts). Notably, in Decision No. 63584 (April 24, 2001), which authorized the sale and transfer of Citizens' water and wastewater systems to Arizona-American, the Commission ordered that Citizens' AIAC and CIAC balances be imputed to Arizona-American and deducted from rate base, based on a settlement agreement made between Staff and the Company. Stephenson Dt. (Ex. A-64) at 8-10.[11] As a consequence of imputing Citizens'

[11] A copy of Decision No. 63584 is attached to each of Mr. Stephenson's Direct

AIAC and CIAC balances to Arizona-American and, moreover, trending those balances to a reconstruction new basis, the RCRB for each district is substantially (and artificially) reduced. *See, e.g.*, Bourassa Rj. (Ex. A-24) at Rejoinder Schedules B-1 (showing deduction of AIAC and CIAC from RCRB).

The Company's RCRB for each district is also understated because the Company did not trend or otherwise determine a current value for its real property, franchises, organizational costs and other intangibles. The Company initially did trend these assets because, just like any other item of plant or property, the value of real estate and the costs associated with obtaining franchises and organizing a utility are greater today than their historic cost. *See, e.g.*, Stout Rb. (Ex. A-51) at 10; Bourassa Rb. (Ex. A-21) at 16-17. The inclusion of these assets at their original or historic cost, as opposed to their current value, reduces the rate base. However, the Company made this adjustment in its rebuttal filing in order to eliminate any disagreement with Staff regarding its RCN studies, as explained above.

Moreover, it is well established that the fair value of a utility's property should include an allowance for its value as an established business enterprise or going concern:

> That there is an element of value in an assembled and established plant, doing business and earning money, over one not thus advanced, is self-evident. This element of value is a property right, and should be considered in determining the value of the property, upon which the owner has a right to make a fair return when the same is privately owned although dedicated to public use.

McCardle, 272 U.S. at 414, *quoting Denver v. Denver Union Water Co.*, 246 U.S. 178, 191 (1918); *Des Moines Gas Co. v. Des Moines*, 238 U.S. 153, 165 (1915). However, Arizona-American did not include any amount in its RCRB for each district based on their value as a going concern.

Testimonies as Exhibit 1. The Settlement Agreement is attached to the decision.

Finally, in this particular case, the use of each district's RCRB as its fair value rate base is supported by the purchase price recently paid by Arizona-American for the water and wastewater systems and related assets owned by Citizens. This transaction was finalized on January 15, 2002, and the final purchase price was approximately $276,500,000. Stephenson Dt. (Ex. A-64) at 10. The purchase price was determined by arms-length negotiations between two independent and sophisticated utilities. *Id.* The purchase price reflected the current value of Citizens' utility plant and assets. Stephenson Rb. (Ex. A-74) at 10. The fact that these entities agreed on a purchase price that was substantially greater than the original or book cost of the utility plant and assets in an arms-length transaction clearly establishes that the use of an OCRB to set rates in this proceeding would violate the fair value standard. Bourassa Rb. (Ex. A-21) at 9-10; Bourassa Dt. (Ex. A-1) at 14-15.[12]

In short, under the particular circumstances in this case, Arizona-American maintains that the RCRB for each district should be adopted and used as the districts' fair value rate bases. For the reasons set forth above, the RCRB for each district is conservative and substantially understates the current value of the utility plant and property used for the provision of utility service. In addition, the recent purchase transaction between Citizens and Arizona-American – two independent and sophisticated entities – shows that the current value of each district's utility plant and property substantially exceeds original cost. Therefore, it would be unlawful to simply average OCRB and RCRB to determine fair value.

[12] It should be emphasized that the Company is not suggesting that the Commission should simply use the purchase price paid by Arizona-American as the fair value rate base. "However, the Commission must consider all available evidence related to the fair value, and an inquiry into a recent purchase transaction might be of assistance, in the discretion of the Commission." *Arizona Water*, 85 Ariz. at 203, 335 P.2d at 415. Here, the recent purchase transaction is certainly evidence that the current value of the districts' utility plant and property substantially exceeds its original cost.

3. The "Acquisition Adjustment" Issue Is Irrelevant to the Company's Fair Value Rate Base.

A number of the parties have accused Arizona-American of attempting to recover a return on an "acquisition premium" in this case. As the Company's witnesses have repeatedly stated, this is simply not true. In reality, the discussion concerning an "acquisition premium" or "acquisition adjustment" is simply a red herring. Although Arizona-American has recorded an acquisition adjustment as required by the National Association of Regulatory Utility Commissioners Uniform System of Accounts, the Company is not requesting recovery on or of that adjustment in this proceeding. *E.g.,* Stephenson Rb. (Ex. A-74) at 9-11.

a. An Acquisition Adjustment Is an Accounting Concept That Has Nothing to Do with Fair Value Rate-Making.

The acquisition adjustment that has been discussed by the parties in this case results from Arizona-American's acquisition of the Citizens' water and wastewater systems, the purchase price of which, as discussed above, was approximately $276,500,000. Stephenson Dt. (Ex. A-64) at 10. Under the Uniform System of Accounts, Arizona-American was required to record the difference between (1) the cost (i.e., purchase price) of Citizens' water and wastewater systems and (2) the original cost of Citizens' utility plant and property, less any amounts credited at the time of the acquisition to accumulated depreciation, accumulated amortization and contributions in aid of construction with respect to such property. *See* Ex. A-86 (Uniform System of Accounts, Balance Sheet Account No. 114). As explained by Mr. Stephenson:

> As a preliminary matter, I should note that the "premium" is really not a premium. Instead, it is the difference between the recorded book costs, less depreciation, of Citizens' utility plant and assets and the purchase price negotiated between Citizens and Arizona-American and its parent, AWW. The purchase price reflected the current value of Citizens' utility plant and assets. For accounting purposes (not valuation

> purposes), an acquisition adjustment or "premium" is recorded on the books of Arizona-American based on the purchase price paid.

Stephenson Rb. (Ex. A-74) at 9-10.[13]

In Decision No. 63584 (April 24, 2001), the Commission approved the acquisition and transfer of Citizens' water and wastewater systems to Arizona-American and, based on the settlement agreement made between Arizona-American and Staff, ordered that "the decision to allow recovery of an acquisition adjustment [in rates] be based on Arizona-American's ability to demonstrate the clear, quantifiable and substantial net benefits have been realized by ratepayers, which would not have been realized had the transaction not occurred." Decision No. 63584 at 15 and 16. The Company recognizes this requirement and, in this rate proceeding, is not requesting recovery of the acquisition adjustment. Stephenson Dt. (Ex. A-64) at 23. As explained by Mr. Stephenson, Arizona-American took over operation of the Citizens' systems in January 2002, and simply does not have sufficient operating experience with those systems at the present time. *Id.* *See also* Stephenson Rb. (Ex. A-74) at 10-11 ("Arizona-American has not attempted to prove the net benefits at this time. Obviously, we have provided a showing of what net benefits might be expected, and as shown later in this testimony, we do have a reasonable idea of the quantity of some of those benefits, but an acquisition adjustment is not requested in this case."). Very simply, then, with the exception of seeking approval of an amortization method (discussed below), recovery of an acquisition adjustment is simply not an issue.

There are two aspects of Arizona-American's filing, however, that have generated

[13] The recording of an acquisition adjustment in this manner is necessary to ensure that the utility's balance sheet "balances." For example, assume that a utility purchases a water system owned by another utility for $1 million, the water system's current value. However, the original or book cost of the utility plant and property comprising the water system is $700,000. The purchase is funded by a mixture of debt and equity, which increases the acquiring utility's liability and equity balance sheet accounts by $1 million. Unless an acquisition adjustment in the amount of $300,000 is also recorded, the acquiring utility's assets would increase by $700,000 for book purposes, while its total liabilities and equity would increase by $1 million.

confusion. First, in its OCRB schedules for each district, Arizona-American has shown an acquisition adjustment as a component of the rate base. As the Company's witnesses have explained, however, the acquisition adjustment has been shown on the OCRB schedules for illustrative purposes. Arizona-American is requesting that its RCRB be used as its fair value rate base in this proceeding. *E.g.*, Bourassa Rb. (Ex. A-21) at 7. Arizona-American has not included any acquisition adjustment (or "premium") in the computation of its RCRB. *E.g.*, Stephenson Rb. (Ex. A-74) at 10. This is readily apparent from the Company's Rejoinder Schedule B-1 for each district, attached to Mr. Bourassa's Rejoinder Testimony. It is also consistent with fair value rate-making methodology: A fair value rate base is based on the current value of the utility's property devoted to public service. An acquisition adjustment, which is based on the difference between the cost of purchasing the property and its original cost of construction, is irrelevant to the property's *current value.*

The second area of confusion relates to the amortization of the acquisition adjustment account balance. In its initial filings for the districts, the Company erroneously included recovery of the amortization as part of depreciation expense. Stephenson Rb. (Ex. A-74) at 10; Bourassa Rb. (Ex. A-21) at 7-8. The amortization was removed from the Company's rebuttal schedules, and the Company's final position, reflected in the schedules attached to Mr. Bourassa's rejoinder testimony, does not include any recovery of the amortization of the acquisition adjustment account balance. *Id.* In short, under the Company's final position, the acquisition adjustment will not be accorded rate base treatment, nor will the amortization of the acquisition adjustment be included in the cost of service.

b. Arizona-American Should Be Authorized to Amortize the Acquisition Adjustment Over 40 Years Using Mortgage-Style Amortization.

Arizona-American does request approval to amortize the acquisition adjustment

balance by means of a mortgage-style amortization method over a 40-year period. Stephenson Dt. (Ex. A-64) at 21-23. Regardless of whether the acquisition adjustment is recognized in rates, it must be recorded on the Company's books in accordance with the Uniform System of Accounts, as explained above. At present, the acquisition adjustment is being amortized below-the-line on a Company-wide basis (i.e., the acquisition adjustment is not allocated among the water and wastewater districts) using a straight-line amortization method. The mortgage amortization method provides a better matching of the recovery of the acquisition adjustment by amortizing it on an increasing basis over the recovery period, instead of leveling the recovery under the straight-line method. *Id.* at 22. Again, approval of the amortization method and period pertains specifically to the book treatment of the acquisition adjustment, and will have no impact on rates and charges for service in this proceeding. Stephenson Rb. (Ex. A-74) at 16-17. The Commission does not have to allow the recovery of the acquisition adjustment in rates in order to issue a ruling on the Company's request. Stephenson Rj. (Ex. A-75) at 13; TR at 1223-26.

C. Other Adjustments to Rate Base.

1. Staff's Failure to Reduce Accumulated Depreciation for Not Used and Useful and Unidentified Plant Is Arbitrary and Punitive.

The Company adjusted accumulated depreciation for the full original cost value of plant that had been previously afforded rate base treatment and adjusted the accumulated depreciation balance at December 31, 2001 for plant not afforded previous rate base treatment. Bourassa Rb. (Ex. A-21) at 6. These adjustments were made for two reasons. First, the unidentified and not-in-service plant given previous rate base treatment should now be retired. This plant was considered used and useful in a prior rate proceeding and the Company contends that it should be properly treated as retired. *Id.* Second, the unidentified and not-in-service plant not given previous rate base should be abandoned. This plant was never considered used and useful in a prior rate proceeding and the

Company contends that it is properly treated as abandoned. *Id.*

Staff disagrees with the Company's adjustments, leading to a difference in the parties' accumulated depreciation balances of approximately $438,000. *Id.*; *see also* TR at 1162. First, Staff classified not used and useful plant as plant held for future use that could eventually be placed back into service, at which time recovery would be made. Bozzo Sb. (Ex. S-44) at 7. However, Staff's treatment of such plant is belied by the fact that these plant items have exceeded their useful life and future use is not a viable option. TR at 240-41.

Staff also asserts that retirement or abandonment of these not used and useful and unidentified plant items is not justified. Bozzo Sb. (Ex. S-44) at 7-8. Specifically, although Mr. Bozzo admits that accumulated depreciation should be removed for retired plant, Staff argues the Company's failure to previously retire these plant items demonstrates that retirement is not warranted. *Id.* According to Staff witness Bozzo, it is the Company's responsibility, not Staff's to retire plant by keeping accurate books and records. TR at 1163. Staff's position is unfairly punitive. For one thing, Arizona-American only recently took ownership and simply could not have assessed the "usefulness" of every plant item before it filed these applications. Bourassa Rj. (Ex. A-254) at 5. Moreover, it was Citizens' inaction that caused the plant to be recorded as plant-in-service, not Arizona-American's. *Id.* In sum, these plant items are appropriate for retirement or abandonment and should be afforded the proper treatment for ratemaking purposes, notwithstanding Staff's desire to punish Arizona-American for Citizens' bookkeeping shortcomings.

2. RUCO Errors Render RUCO's Plant Balances and Rate Base Suspect.

The Commission cannot rely on RUCO's plant in service and rate base because RUCO's calculations are fraught with error. For example, lead RUCO witness Diaz-

Cortez made an adjustment to remove AFUDC from plant-in-service. TR at 769-70. The Commission, in the last rate case involving these districts, ordered an adjustment to Citizens' AFUDC balance and Ms. Diaz-Cortez believed that the adjustment was not made by Citizens. TR at 774. As recognize by lead Staff witness Carlson, however, Citizens had properly made the AFUDC adjustment ordered by the Commission. TR at 1489-90. Therefore it was inappropriate to make this adjustment for a second time. TR at 1490. RUCO witness Coley recognized during cross-examination that his calculation of accumulated depreciation was in error due, at a minimum, to a series of mathematical errors. TR at 523-44. Similarly, cross examination of RUCO witness Moore revealed similar errors in Mr. Moore's determination of accumulated depreciation. TR at 618-30. To date, RUCO has made no effort to provided corrected schedules addressing these errors. Accordingly, the Commission should reject RUCO's determination of plant in service and rate base for Arizona-American's water and wastewater systems subject to this proceeding.

3. RUCO's Use of the Half Year Convention Is Inappropriate.

Even without the errors discussed above, RUCO's plant balances and rate base are understated as a result of using the half-year convention. Irrespective of when in a given year a plant item goes into service, the half-year convention treats the plant item as being placed in service as of June 30/July 1 for the purpose of calculating accumulated depreciation. RUCO correctly asserts that the half-year convention is typically utilized in ratemaking proceedings. Diaz-Cortez Sb. (Ex. R-8) at 7; Moore Sb. (Ex. R-4) at 4. RUCO is also correct that the half-year convention should be utilized absent a reason to depart from the usual methodology. *Id.* Such reasons exist in this case. Unlike most utilities, Arizona-American employs a half-month convention whereby the plant item is treated as being placed in service on the 15th of the month it becomes operational. Bourassa Rb. (Ex. A-21) at 7. There is no reason to be less accurate than the Company's

system allows for, particularly when use of the half-year convention arbitrarily lowers the revenue requirement. *Id.* Notably, like the Company, Staff did not utilize the half-year convention in its preparations.

III. INCOME STATEMENT ISSUES.

A. The Company's Pro Forma Adjustments to Remove Citizens' Overheads and Salaries and Wages and Bring in AWW Overheads, Salaries & Wages and Service Company Charges Is Appropriate.

During the test year, Citizens incurred approximately $7.3 million in salaries and wages and corporate overhead allocations in connection with its Arizona water and wastewater operations. Exhs. 88 and 89. These costs included charges from Citizens' corporate offices in Stamford, Connecticut, Dallas, Texas and Harvey, Louisiana. TR at 253. The primary support center for Citizens' Arizona water and wastewater operations came from the Harvey office and included management oversight and administration, such as accounting, billing and information technology support. TR at 255-56. These costs terminated with the close of the Citizens' acquisition by Arizona-American and the Company does not incur overhead allocations or salaries and wages associated with Citizens' administration of water and wastewater operations in Arizona. TR at 282-83; 993-994. In other words, the Citizens' test year corporate overhead allocations and salaries and wages are non-recurring test year expenses.

Non-recurring expenses are those that will not be incurred by the utility in connection with its operations on a going-forward basis. TR at 1544-45. Consistent with sound ratemaking practices, the Company made a pro forma adjustment to remove the non-recurring Citizens' test year salaries and wages and corporate overhead allocations. Thereafter, the Company made a second series of pro forma adjustments to reflect AWW overheads, Service Company charges and salaries and wages that were being charged to the Company in connection with its operations from the time the Citizens' acquisition closed and on a going-forward basis. *Id.* These charges were and are being incurred by

Arizona-American for administrative and general management such as accounting, billing, regulatory compliance ratemaking, capital planning and budgeting. TR at 965.

RUCO accepted the Company's pro forma adjustment to remove the Citizens' test year corporate overheads and salaries and wages because the Citizens' data was irrelevant to Arizona-American's operations on a going-forward basis. TR at 609, Moore Dt. (Ex. R-3) at 3. RUCO further agreed with the Company's pro forma adjustment to bring in American Water Works ("AWW") overheads, Service Company charges and salaries and wages. TR at 609-10; Moore Dt. (Ex. R-3) at 19-21, 23-24. However, RUCO's recommended expense level for this adjustment is understated by approximately $500,000. TR at 614-618.

Staff, on the other hand, opposes both pro forma adjustments claiming that the pro forma adjustment to reflect AWW overheads, Service Company charges and salaries and wages is not known and measurable and results in a mismatch between rate base, revenue and expenses. *E.g.*, TR at 966-67. In addition, Staff argues that the pro forma adjustment made by the Company and RUCO does not benefit ratepayers. *Id.* Each of Staff's arguments should be rejected.

The AWW overheads, Service Company charges and wages and salaries are known and measurable. The Company did utilize estimates with its initial filing. Stephenson Rb. (Ex. A-74) at 6-7. However, all parties were timely provided actual expense amounts from 2002, the first year the 10 districts were operated by Arizona-American. Stephenson Rb. (Ex. A-74) at 19. As a result, in its direct filing, RUCO replaced the estimated expense levels for AWW overheads, Service Company charges and wages and salaries with the actual amounts incurred by Arizona-American in 2002. Moore Dt. (Ex. R-3) at 19-21, 23-24. Then, in rebuttal, the Company agreed to the use of the actual expense levels, but disagreed with RUCO that the amounts incurred in January 2002 ($22,441) and February 2002 ($215,344) were representative of the Company's normalized expense

levels. The Company's acquisition of Citizens' water and wastewater assets and operations was completed in mid-January 2002 and it took a few weeks to fully implement its administrative and general management processes. TR at 613-14. Accordingly, Arizona-American proposes that the level of AWW overheads, Service Company charges and salaries and wages be based on the monthly average (approximately $412,000) of such costs actually incurred between March and December of 2002. TR at 616. In either case, however, the pro forma adjustment to bring in AWW overheads, Service Company charges and salaries and wages is known and measurable.

Staff's argument that the pro forma adjustment creates an improper mismatch should also be rejected. Specifically, Staff witness Alexander Igwe testified repeatedly that the Company's proposed pro forma adjustment to bring in AWW overheads, Service Company charges, and salaries and wages was improper because it created a mismatch with revenues. *E.g.*, TR at 966, 969, 997; Igwe Dt. (Ex. S-14) at 7. Yet, every pro forma adjustment creates some sort of mismatch between rate base, revenues and expenses and these types of adjustments are specifically authorized by the Commission's rules.[14] They are also necessary and appropriate to ensure a more realistic relationship between rate base, revenues and expenses during the period rates will be in effect. A.A.C. R14-2-103(A)(3)(i) (definition of "pro forma adjustment"). Given that the Company is not incurring charges for Citizens' overheads or salaries and wages, the Company's pro forma adjustment to these charges, as supported by RUCO, meets the Commission's definition.

By contrast, Staff's so-called matching requirements are not codified in any prior Commission decision or in any of the Commission's rules or regulations. In simple terms, what Mr. Igwe is really testifying to when he discusses "matching" is the requirement that

[14] For instance, the Company proposed and Staff accepted an adjustment to revenue due to in lieu payments to be made by Del Webb beginning in 2004. TR at 972-74. This adjustment, which lowers substantially the portion of the revenue requirement paid by customers, clearly creates a "mismatch."

a one-year historical period, with pro forma annualizing and normalizing adjustments for known and reasonable changes, be used for ratemaking purposes. Arizona-American agrees that this is the approach the Commission customarily follows, as well as the approach the Company has taken in this case. However, the mere fact that a pro forma adjustment increases rates is insufficient basis to reject the adjustment. Nor does the magnitude of the adjustment dictate whether it is proper, particularly here where Staff has exaggerated the impact of the Company's pro forma adjustments.

For example, Mr. Igwe repeatedly claimed that the Company's proposed pro forma adjustments ignore $3.5 million of additional revenue realized in 2002, resulting in a substantial and inappropriate mismatch between revenue and expenses. TR at 1027-28. However, the majority, approximately $2.7 million, of the additional revenue in 2002 resulted from surcharges, not revenue from water and wastewater ratepayers. TR at 1551. Had the Company filed using a 2002 test year, the additional revenue from surcharges would have been removed from the revenue calculation. Put simply, Mr. Igwe was not comparing apples to apples when he discussed a $3.5 million revenue increase from 2001 to 2002. *Id.*

Furthermore, Mr. Igwe has dramatically overstated the impact of the Company's two pro forma adjustments in order to portray these adjustments as harmful to ratepayers, Mr. Igwe's testimony that the two adjustments result in an unnecessary $3.6 million increase to expenses is incomplete. *E.g.*, TR at 999. Actually, Mr. Igwe attempted to separate related adjustments into distinct and unrelated adjustments, painting a picture of a utility trying to overcharge its customers. TR at 1548-49. As Company witness Bourassa explained, however, the adjustments are inter-related and a program to compare Citizens' overhead allocations and salaries and wages with the AWW overheads, Service Company charges, and salaries and wages was created and utilized to ensure an "apples to apples" comparison. TR at 1545-47. The Company went to great lengths to ensure that its

adjustments did not result in any double recovery and the net impact of the two pro forma adjustments was an increase of approximately $1.5 million to operating expenses. *Id.*

It is also clear that ratepayers are benefiting from the AWW overheads, Service Company charges and wages and salaries, even at a higher expense level. The Company has presented substantial evidence that Citizens' test year overheads and salaries and wages were artificially reduced as a result of the pending sale of the water and wastewater utility assets to AWW. *E.g.*, Jones Rj. (Ex. A-35) at 3-9; TR at 250-256, 284. It is true that service to customers remained adequate during the test year. It is equally clear that this level of service would not have continued. *Id.* Citizens has ceased all long-range planning for capital improvements, reduced staffing levels, postponed important management decisions and terminated IT support. The Company's witnesses testified that this situation would, left unchanged, have impacted the ability to maintain adequate service to ratepayers. Jones Rj. (Ex. A-35) at 7-8; TR 284, 1603-05. The situation did change, however, the acquisition was completed and AWW and Arizona-American incorporated its administrative and general management programs into its Arizona operations ensuring adequate service to all customers. It is the AWW overheads, Service Company charges, and salaries and wages that Arizona-American will incur during the period the rates approved in this proceeding are in effect. These costs are reasonable and necessary and should be recovered by the Company through rates.

B. RUCO's Determination of the Appropriate Property Tax Expense Level Must Be Rejected.

This Commission has repeatedly held that proposed revenue increases should be considered in determining the appropriate level of property tax expenses to be recovered through rates. For example, in Decision No. 64282 (Dec. 28, 2001), the Commission accepted Arizona Water Company's property tax calculation, which included consideration of proposed revenues. *See* Decision No. 64282 at 12-13. Similarly, in

Decision No. 65350 (Nov. 1, 2002), the Commission concluded that "the most logical approach is to use the two most recent historic years' revenues, and the projected revenues under the newly approved rates." Decision 65350 at 16. This is the manner in which the Company's proposed property taxes were determined. *E.g.*, Bourassa Dt. (Ex. A-1) at 14. Staff employed a similar methodology. Igwe Dt. (S-14) at 19.

According to RUCO, property taxes should be calculated without considering proposed revenues because the Arizona Department of Revenues valuation methodology utilizes three previous years' revenue levels to determine property tax expense. Coley Sb. (Ex. R-2) at 2. This is true. However, the Commission is setting rates on a going-forward basis. Accordingly, the prior years used by RUCO in this case to determine the proposed level of property tax expenses, 1999, 2000 and 2001, will never again be used by ADOR in determining property tax levels for Arizona-American. Accordingly, RUCO's calculation of the proper level of property tax expenses is understated. For this reason, as Mr. Coley recognized on cross-examination, the Commission has consistently rejected the methodology advocated by RUCO. TR at 559. The Commission should do so again in this case.

C. Rate Case Expense.

1. Arizona-American's Request to Recover $715,000 in Rate Case Expenses is Reasonable and Should Be Approved.

This has been a lengthy, complicated and at times difficult ratemaking proceeding and the parties and the Commission have invested extensive resources to its prosecution. At the end of some 16 months, there will have been five applications, 10 parties, hundreds of data requests, five rounds of prefiled testimony, 9 days of hearings, over 100 hundred marked exhibits, hundreds of pages of transcripts and two rounds of briefing before the matter goes before the Commission. TR at 799-802. There can be no legitimate dispute that Arizona-American will have expended significantly more resources than the other

parties. As a result, it was estimated that the Company's final rate case expense will be roughly $1.5 million.[15] TR at 376. Arizona-American seeks to recover $715,000 in total rate case expense, roughly half of the amount it will have incurred by the time the Commission's decision is issued. *E.g.*, Stephenson Rj. (Ex. A-75) at 8; TR at 1593-94.

Only RUCO challenges the Company's request. RUCO witness Marylee Diaz-Cortez argues that the Company's rate case expense is exorbitant and unprecedented. Diaz-Cortez Dt. (Ex. R-7) at 25-26. $715,000 is a significant amount of rate case expense. TR at 1594. It is not, however, unreasonable, and RUCO's analysis, which relies primarily on comparison to Citizens' authorized level of rate case expense from the last rate case filed in 1995, is overly simplistic. As Ms. Diaz-Cortez recognized, rate case expense must be viewed in light of the unique characteristics of this proceeding. TR at 809. Citizens' 1995 rate proceedings involved fewer districts and fewer customers. TR at 812. In addition, Citizens employed specific individuals that were assigned the task of prosecuting rate applications and those expenses were included in the management fees charged to the districts. Stephenson Rb. (Ex. A-74) at 23-24. This is not the case for AWW and Arizona-American, something Ms. Diaz-Cortez ignores in her analysis of rate case expense. In fact, the only factor Ms. Diaz-Cortez considered was the inflation rate. TR at 812. Again, this is overly simplistic.

Ms. Diaz-Cortez' claim that the Company is to blame for the significant rate case expense must also be rejected. Ms. Diaz-Cortez claims that the Company should have been more efficient in preparing its application and that some of its "choices" led to increased rate case expense. TR at 782-83. As examples Ms. Diaz-Cortez points to the selection of the test year and the filing of RCND schedules. Neither of these factors

[15] Through November 2003, the Company had already incurred over $1 million dollars in rate case expense, exclusive of certain costs incurred in November that had not yet been billed to Arizona-American. TR at 1593. According to the most current estimate, the Company's total rate case expense will be between $1.3 and $1.4 million.

justifies a reduction in the level of rate case expense to be recovered by Arizona-American. Regarding the latter, the Commission's rules allow for the filing of RCND schedules and there is simply no evidence that the Company's argument that it is entitled to earn a just and reasonable rate of return on the fair value of its rate base has unduly increased rate case expense.

Nor does the evidence reflect that selection of a 2001 test year had an undue impact on the level of rate case expense. In fact, the majority of the activities leading to rate case expense would have been unchanged if the Company would have delayed its filing. TR at 136-38. For instance, the most labor-intensive aspect of the Company's filing involved reconstruction of plant, the subject of 80% of the data requests served on the Company. Ex. 102; TR at 1540-41. Selection of a test year after 2001 would have lengthened the intervals between rate filings for the systems at issue, already between 7 and 13 years, making plant analysis even more difficult. TR at 1537. Likewise, each of the Company's 10 water and wastewater systems has a different set of tariffs and billing codes, making the bill counts extremely difficult to prepare irrespective of the test year selected. TR at 1532-33. In fact, the only issue raised in this proceeding as a result of the Company's selection of a 2001 test year was the dispute between Staff and Arizona-American over pro forma adjustments to general and administrative costs, which adjustments were supported by RUCO. Even assuming this factor, or any other factor raised by RUCO for that matter, had a disproportionate impact on the level of rate case expense, the Company's request to recover approximately half the amount it actually incurred means Arizona-American is going to absorb any amount of rate case expense that should not be borne by ratepayers.

Ms. Diaz-Cortez is also mistaken in her assertion that the Company's rate case expense by itself has created the need for rate increases. To the extent, Ms. Diaz-Cortez is testifying that the Company's filings were unnecessary and unwarranted, Arizona-

American certainly does not agree. In fact, a rate decrease is only proper in one of the company's systems, Anthem water for which the Commission required this filing. For Mohave water, the passage of time since its last case, 12 years, dictated that Arizona-American file now, lest information become more stale. *Id.* In other words, these cases essentially had to be filed when they were, no matter how large or small the increase requested. Stephenson Rj. (Ex. A-75) at 8-9.

Consequently, RUCO's recommended rate case expense of $418,000 is wholly insufficient. This amount, calculated by Ms. Diaz-Cortez by simply adjusting the 1995 rate case expense for inflation, is less than one-third of the amount actually incurred by Arizona-American. TR at 812. Amazingly, by way of comparison, Intervener Youngtown will incur approximately $70,000 on expert witness fees, exclusive of legal fees, in connection with its intervention in this proceeding. TR at 1255-57. Youngtown intervened to address a few narrow issues in connection with only 2 of the 10 districts at issue in this proceeding. *Id.* Youngtown obviously had far less to do in this proceeding than the Company and, in fact, relied on almost entirely on the data produced by other parties. *Id.* Certainly, it should come as no surprise that Arizona-American's rate case expense would be at least 10 times the amount Youngtown incurred for expert witnesses to assist with its limited intervention.

By way of further comparison, the Company's requested rate case expense is lower than the per customer cost that the Company has historically been allowed in its prior two cases. Stephenson Rb. (Ex. A-74) at 24. The prior historical allowance was $13.25 and the Company's proposal in this case is $7.39 per customer, or $2.46 per customer per year for three years. *Id.* This is hardly exorbitant.

2. Amortization Period

Arizona-American seeks to amortize rate case expense over three years, based on the anticipated maximum interval between this proceeding and the next rate case for these

districts. *Id.* at 24-25. Only Youngtown questions the amortization period for rate case expense based on the fact that it has been a long time in between rate filings for these districts. Stephenson Rb. (Ex. A-74) at 24-25. However, Citizens' track record is irrelevant. Arizona-American has a track record of filing rate cases much more often. *Id.* For example, the Paradise Valley water district of Arizona-American filed applications for rate increases 5 times in an 8 year period, or one every 1.6 years. Moreover, the new arsenic treatment requirements will require a significant plant investment prior to January 1, 2006, or in less than 3 years, which will likely lead to new rates cases being filed in less than five years. In short, the next rate application will likely be filed at the first possible opportunity. *Id.*

IV. COST OF CAPITAL AND RATE OF RETURN.

A. Overview: the Applicable Legal Standard.

Over the past 100 years, the United States Supreme Court, as well as various federal and state courts (including Arizona), have made it clear that a regulated utility is entitled to earn a return on its property devoted to public service that is sufficient to (1) attract capital on reasonable terms (the capital attraction standard); and (2) realize a return that is commensurate with the returns earned by enterprises with comparable risks (the comparable earnings standard). One of the most commonly cited statements of this constitutionally-mandated requirement was set forth by the U.S. Supreme Court in *Bluefield Waterworks*:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The returns should be reasonably sufficient to ensure confidence in the financial soundness of the utility and should be adequate under efficient and economical

> management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.

262 U.S. at 692-93. In Arizona, in particular, the capital attraction and comparable earnings standards established by the Court in *Bluefield Waterworks* remain applicable in determining whether the rate of return is too low and, therefore, confiscatory, because, as previously discussed, Arizona Constitution mandates that the Commission find and use the fair value of Arizona-American's utility plant and property in setting rates. "Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the service are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment." *Id.* at 690.

In this case, only the recommendation of Arizona-American satisfies these criteria. Both Staff and RUCO recommend (1) extremely low rates of return, 6.5% and 6.77%, respectively, and, in addition, (2) apply those low rates or return to the Company's OCRB for each district to derive their revenue requirement. As discussed below, these recommendations result in fluctuating rates of return on the fair value rate bases that vary from district to district, despite the fact that both Staff and RUCO also recommend the use of the Company's entire capital structure and propose a single, company-wide rate of return. *E.g.* Reiker Dt. (Ex. S-45) at 3-4 ("Staff's recommended capital structure is Arizona-American's actual capital structure as of December 31, 2002."). Moreover, as discussed below, their recommendations result in returns that approach or, in some cases, *are actually lower than interest rates on U.S. Treasury securities*. If adopted by the Commission, these rates of return would be patently unreasonable and confiscatory.

B. Capital Structure and Cost of Debt.

The Company recommends the use of its current, company-wide capital structure, embedded cost of debt (including certain short-term debt financing recent capital

improvements) and a cost of equity of 11.5% in determining the appropriate rate of return, as follows:

	Amount	Ratio	Cost	Weighted Cost
Debt	$186,334,000	60%	4.86%	2.91%
Equity	$124,266,000	40%	11.50%	4.60%
Total	$310,600,000	100%		7.51%

Stephenson Rb. (Ex. A-74) at 25-27 and Rebuttal Exhibit 3. Arizona-American has maintained this ratio of debt and equity since its acquisition of Citizens' water and wastewater districts, and intends to continue to maintain, a capital structure consisting of 60% debt and 40% equity. Stephenson Rb. (Ex. A-74) at 13, 27; Stephenson Dt. (Ex. A-64) at 20.[16] As shown, this capital structure results in a weighted cost of capital of 7.51%.[17] That cost of capital should be applied to the Company's fair value rate bases for each district to determine the revenue requirement.

RUCO's capital structure is similar to the capital structure proposed by the Company, but is based on the long-term debt and equity used to finance the acquisition of Citizens' water and wastewater systems, as presented in the Company's direct filing:

	Amount	Ratio	Cost	Weighted Cost
Debt	$165,583,119	59.89%	4.86%	2.91%
Equity	$110,888,158	40.11%	9.61%	3.85%
Total	$276,471,277	100.00%		6.77%

[16] As Mr. Stephenson explained, Arizona-American's capital structure and debt cost results in a substantially lower cost of capital than would have been the case under Citizens' ownership. Citizens had less debt in its capital structure, and its embedded cost of debt was over 7%, as opposed to the Company's debt cost of 4.86%. Stephenson Rb. (Ex. A-74) at 13.

[17] The Company's recommended cost of equity of 11.5% is based on the testimony of Dr. Thomas M. Zepp, which is discussed below, together with the cost of equity recommended by Staff and RUCO.

Rigsby Sb. (Ex. R-6) at Schedule WAR-1. RUCO has also accepted the Company's debt cost of 4.86%, as shown above. *Id.* at 3-4. However, as discussed in Section II of this Brief, RUCO (as well as Youngstown) maintains that this cost of capital should be applied to the OCRB for each district to determine the revenue requirement. The return on the fair value rate base is then adjusted as necessary to produce the same revenue requirement, rendering the fair value finding meaningless. Diaz-Cortez Sb. (Ex. R-8) at 3-4; Ex. R-12 (table showing RUCO rate-making formula).

In contrast to the Company and RUCO, Staff has failed to present a specific capital structure for Arizona-American. Instead, Staff provided only percentages of debt and equity. *See* Reiker Dt. (Ex. S-45), Schedule JMR-9; Reiker Sb. (Ex. S-46), Schedule JMR-S8. In its rate applications, filed on November 22, 2002, Arizona-American similarly presented only debt and equity ratios, rather than the specific amounts of debt and equity comprising its capital structure. *See* Stephenson Dt. (Ex. A-64) at 20. Staff issued a Letter of Deficiency, docketed on December 23, 2002, finding Arizona-American's rate applications deficient for that reason.[18] Given that the Company's initial rate applications were found deficient by Staff because they failed to provide the specific amounts of debt and equity in the Company's capital structure, Staff's testimony is similarly deficient and cannot be used. Therefore, Staff's recommended capital structure and weighted cost of capital must be rejected due to lack of evidence.

In short, both the Company and RUCO have presented recommended capital structures that contain specific dollar amounts of debt and equity, which in turn allow the computation of debt and equity ratios and, ultimately, a weighted average cost of capital.

[18] On January 3, 2003, Arizona-American filed supplemental testimony and revised D Schedules providing the specific amounts of debt and equity in its capital structure in order to correct this deficiency. *See, e.g.,* Stephenson Supp. Dt. (Ex. A-69) at 1-2 and Tab A (Sun City districts). Notably, the amounts shown on those schedules reflect the total debt and equity utilized to acquire the Citizens' water and wastewater systems and, therefore, are consistent with RUCO's recommended capital structure.

The Company's capital structure, set forth above, is based on Arizona-American's total capital supporting all of its Arizona water and wastewater districts at present. RUCO, in contrast, recommends the use of a capital structure that is based on the amount of long-term debt and equity used to finance the acquisition of the Citizens' water and wastewater systems, which is the capital structure the Company originally proposed. In either case, the percentages of debt (60%) and equity (40%) are the same. In addition, the Company and RUCO both agree that the correct cost of debt is 4.86%. Staff, on the other hand, has violated the Commission's rules by failing to present a capital structure containing the specific amounts of debt and equity it recommends. Accordingly, Staff's capital structure and the resulting weighted cost of capital must be rejected.

C. Cost of Equity.

1. Overview of Dr. Zepp's Pre-Filed Testimony.

In his direct testimony, filed in November 2002, Dr. Zepp testified that Arizona-American had an equity cost that fell in the range of 11.5% to 12.1% and recommended Arizona-American be authorized a return on equity ("ROE") of no less than 11.5%. Zepp Dt. (Ex. A-44) at 3-4 and Table 24. His recommendation included 60 basis points to compensate the Company for its above-average financial risk due to its capital structure containing 60% debt and 40% equity. *Id.* at 21. Staff witness Joel Reiker estimated Arizona-American requires only 50 basis points to compensate the Company for above-average leverage. Reiker Dt. (S-45) at 27.

In his September 2003 rebuttal testimony, Dr. Zepp adopted Mr. Reiker's 50 basis point adder, updated his testimony with current information, and found Arizona-American's cost of equity now falls in a range of 10.5% to 11.7%. Zepp Rb. (Ex. A-49) at 2, 5 and Update Table 24.

As part of his rebuttal testimony and, in his November 2003 rejoinder testimony, Dr. Zepp restated the equity costs made by Mr. Rigsby and Mr. Reiker with assumptions

that are consistent with the approaches they chose to use. Zepp Rb. (Ex. A-49) at 34-41, 42-53 and Rebuttal Table 14; Zepp Rj. (Ex. A-50) at 10-14 and Rejoinder Table 14. Using their models with more reasonable assumptions, he found the cost of equity for Arizona-American fell in a range of 10.1% to 11.8% based on data presented in their direct testimonies and 10.3% to 11.4% based on data they relied upon in their surrebuttal testimonies. *Id.* Those estimates also included 50 basis points to compensate Arizona-American for its above-average financial risk.

Dr. Zepp recommended his equity cost should be combined with the Company's 60% debt/40% equity capital structure, and applied to the Company's fair value rate base for each district. His testimonies explain the basis for his recommendation and responses to Staff and RUCO regarding the proper use of fair value rate base to determine the revenue requirement. Zepp Dt. (Ex. A-44) at 5-11; Zepp Rb. (Ex. A-49) at 27-33; Zepp Rj. (Ex. A-50) at 7-8 and 30.

2. All Parties Agree Arizona-American Requires a 50 Basis Point Adder for Leverage.

In his direct testimony, Dr. Zepp presented a standard financial theory that shows Arizona-American requires a higher ROE because it is more leveraged. Zepp Dt. (Ex. A-44) at 18-19 and Table 5. Based on that theory, he estimated the equity cost adder required by Arizona-American is 80 to 90 basis points, but, to be conservative, adopted a value of 60 basis points to determine the Company's cost of equity. *Id.* In direct testimony, Mr. Reiker presented a different method to determine the equity cost adder and found that method supported a value of only 50 basis points. Reiker Dt. (Ex. S-45) at 27-30. To avoid an issue and be conservative, Dr. Zepp adopted Mr. Reiker's estimate. Zepp Rb. (Ex. A-49) at 26-27. In his direct testimony, Mr. Rigsby, the RUCO cost of capital witness, did not propose such an adjustment. But after reading Mr. Reiker's and Mr. Stephenson's testimonies, in his surrebuttal testimony Mr. Rigsby agreed that the 50 basis

point adder to the cost of equity for less leveraged water utilities was appropriate. Rigsby Sb. (Ex. R-6) at 10. All parties now agree that the adder should be no less than 50 basis points (0.5%).

3. Cost of Equity for Publicly-Traded Water Utilities.

Dr. Zepp used the discounted cash flow ("DCF") model and three risk premium models to estimate benchmark equity costs with data for publicly traded water and gas utilities. He also presented estimates based on the capital asset pricing model ("CAPM") because RUCO and Staff have relied upon that model in the past, but gave those estimates no weight. Based on the data Dr. Zepp examined in 2002 and 2003, gas utilities require equity costs that are no greater than 50 basis points higher than the required returns for publicly traded water utilities. Zepp Rb. (Ex. A-49) at 6, 10-11 and Update Table 4. In using the data for the gas utilities to determine proxy estimates of equity costs for the benchmark water utilities, he reduced equity cost estimates for the gas utilities by 50 basis points.

a. DCF Model Estimates.

Using the DCF model and an average of two forward-looking measures of growth, Dr. Zepp updated his DCF costs of equity in September 2003. He found the current equity cost for the benchmark water utilities fell in a range of 10.0% to 10.5%. Zepp Rb. (Ex. A-49) at 5-6 and Update Tables 13 and 18. Dr. Zepp also restated Mr. Reiker's DCF estimates based on the constant growth model, noting that the worst measure of average future growth for that DCF model is dividends per share ("DPS") when earnings per share ("EPS") are growing more rapidly. Dr. Zepp presented evidence that reliance on DPS growth in the constant growth DCF model produces results that are nonsense. Zepp Rb. (Ex. A-49) at 46-47; Zepp Rj. (Ex. A-50) at 11. Restating Mr. Reiker's constant growth DCF estimates without DPS growth in the average, Mr. Reiker's equity cost with the constant growth DCF model was found to fall in range of 9.6% to 9.9% based on data in

his direct testimony and 9.6% to 9.8% in his surrebuttal. Zepp Rb. (Ex. A-49) at 47 and Rebuttal Tables 10 and 11; Zepp Rj. (Ex. A-50) at 10-11 and Rejoinder Tables 3 and 4.

Dr. Zepp also restated Mr. Reiker's multi-stage DCF model by including a second stage that properly reflects investors' expectations that future growth will be higher than current DPS growth when DPS are growing more slowly than EPS. Zepp Rb. (Ex. A-49) at 47-50 and Rebuttal Tables 8 and 9; Zepp Rj. (Ex. A-50) at 11-13 and Rejoinder Tables 1 and 2. Dr. Zepp presented an e-mail from Myron Gordon, an authority on the DCF model, which supported the inclusion of this second stage. Zepp Rj. (Ex. A-50), Exhibit TMZ-RJ2. With this restatement of Mr. Reiker's multi-stage DCF model, the equity cost for the benchmark water utilities was found to be 10.1% at the time Mr. Reiker prepared his direct testimony and 10.0% to 10.1% at the time he prepared his surrebuttal testimony. Zepp Rb. (Ex. A-49) at 49-50; Zepp Rj. (Ex. A-50) at 12.

Dr. Zepp also restated Mr. Rigsby's DCF results by basing Mr. Rigsby's estimate of VS (external) growth on a more realistic forecast of the growth in the number of shares of common stock expected to be issued by water utilities. Zepp Rb. (Ex. A-49) at 51-53. Dr. Zepp showed that past growth in shares had averaged 4.5% and forecasted growth in shares averaged 2.8%, but Mr. Rigsby used a paltry 1.0% growth rate. *Id.* at 51 and Rebuttal Table 12; Zepp Rj. (Ex. A-50) at 5. Dr. Zepp also restated Mr. Rigsby's DCF model results using estimates of future BR (sustainable) growth and VS growth presented by Mr. Reiker. Zepp Rb. (Ex. A-49) at 53 and Rebuttal Table 13. With these two separate restatements of Mr. Rigsby's DCF model, Mr. Rigsby's DCF estimate for the benchmark water utilities fell in a range of 10.1% to 10.9%. *Id.* The restatements of Mr. Reiker's and Mr. Rigsby's DCF models indicate the cost of equity for the benchmark water utilities falls in a range of 9.6% to 10.9%, a range that overlaps Dr. Zepp's updated range of 10.0% to 10.5%.

b. Risk Premium Estimates.

Dr. Zepp presented three different risk premium models that indicate the updated cost of equity for publicly traded water utilities currently falls in a range of 10.3% to 11.2%. Zepp Dt. (Ex. A-44) at 42-45 and Tables 21, 22 and 23; Zepp Rb. (Ex. A-49) at 6 and Update Tables 21, 22 and 23. This method of determining the cost of equity has been summarized by Dr. Roger Morin as follows:

> The risk premium method of determining the cost of equity, sometimes referred to as the "stock-bond-yield spread method" or the "risk positioning method," or again the "bond-yield plus risk-premium" method, recognizes that common equity capital is more risky than debt from an investor's standpoint, and that investors require higher returns on stocks than on bonds to compensate for the additional risk. The general approach is relatively straightforward: First, determine the historical spread between the return on debt and the return on equity. Second, add this spread to the current debt yield to derive an estimate of current equity return requirements.
>
> The risk premium approach to estimating the cost of equity derives its usefulness from the simple fact that while equity return requirements cannot be readily quantified at any given time, the returns on bonds can be assessed precisely at every instant in time. If the magnitude of the risk premium between stocks and bonds is known, then this information can be used to produce the cost of common equity. This can be accomplished retrospectively using historical risk premiums or prospectively using expected risk premiums.

Roger A. Morin, *Regulatory Finance: Utilities Cost of Capital* 269 (1994).

Mr. Rigsby and Mr. Reiker presented CAPM equity costs but did not present separate risk premium estimates. Dr. Zepp explained that the versions of the CAPM that Mr. Rigsby and Mr. Reiker relied upon were special cases of the more general risk premium approach. Zepp Dt. (Ex. A-44) at 41. *See also* Morin, *supra*, at 305-06.

Mr. Rigsby and Mr. Reiker presented versions of the CAPM that are variations of the original CAPM developed by Sharpe and Lintner. Professor William Sharpe, the same person who developed the original CAPM model, has indicated tests of his model

show low beta stocks (like water utilities) require higher returns and high beta stocks (like airline stocks) require lower returns than the returns produced by the versions of CAPM Mr. Reiker and Mr. Rigsby used. Zepp Rb. (Ex. A-49) at 35-36. Professor Sharpe also stated that professionals who use the CAPM in their work use a version of the model that reflects those test results. *Id.* at 40-41. Dr. Zepp took a conservative CAPM approach and used forecasted values for long-term Treasury bonds to restate Mr. Reiker's and Mr. Rigsby's CAPM results. Zepp Rb. (Ex. A-49) at 36-37. Ibbotson Associates and Dr. Morin also implement the CAPM with the model adopted by Dr. Zepp. Zepp Rj. (Ex. A-50) at 6. With this restatement, Dr. Zepp found the cost of equity for the benchmark water utilities fell in a range of 9.8% to 11.3% at the time Mr. Reiker prepared direct testimony, and 9.8% to 10% when Mr. Reiker updated his CAPM estimates. Zepp Rb. (Ex. A-49) at 37-38; Zepp Rj. (Ex. A-50) at 13 and Rejoinder Tables 3 and 4.

Mr. Reiker took issue with the use of forecasted interest rates to make equity cost estimates. Dr. Zepp explained that (1) data underlying Mr. Reiker's Chart 4 show forecasted interest rates are not biased against ratepayer interests and (2) the use of current interest rates instead of forecasted rates will understate the cost of money in 2004 and beyond when the new tariffs will be authorized. Zepp Rb. (Ex. A-49) at 19, 20-21; Zepp Rj. (Ex. A-50) at 23-26. Forecasted interest rates relied upon by Dr. Zepp are consistent with the 50 to 60 basis point increases in intermediate-term Treasury rates that occurred since the time Mr. Reiker and Mr. Rigsby prepared direct testimony. Zepp Rj. (Ex. A-50), Table 6. Mr. Reiker updated his CAPM estimates with September 2003 data, but his updates are still 30 basis points below rates in November. *Id.*

c. The Authorized, Realized and Forecasted Returns on Common Equity Show that Staff and RUCO's Estimates Are Too Low.

Putting aside the technical arguments made by the witnesses regarding the appropriateness of their respective finance models, the cost of equity estimates presented

by Mr. Reiker and Mr. Rigsby are simply not consistent with recent authorized returns on common equity, realized returns on common equity, and *Value Line*'s forecasted returns on common equity, which is indicative of their mechanical application of their models to drive down the return on equity. Under the comparable earnings standard, discussed above, Arizona-American must be permitted to earn a return that is comparable to the returns being earned by companies with corresponding risk. Applying this standard to the recommendations of Staff and RUCO, it is apparent that their recommendations, if adopted, would be confiscatory.

Dr. Zepp prepared a rebuttal schedule based on data published in *Value Line* and *C.A. Turner Utility Reports*, two widely-followed sources of information used by investors. *See* TR at 1395. Under the Efficient Market Hypothesis, investors are assumed to be aware of this information and to base their investment decisions on it. TR at 1394-96. Using Staff's sample group of publicly-traded water utilities, the authorized, realized and forecasted returns on equity ("ROEs") from 1999 through mid-2003 are as follows:

Year	Authorized ROEs	Actual ROEs	*Value Line* Near-Term Forecasts
1999	11.12%	10.59%	11.00%
2000	11.12%	9.75%	11.00%
2001	10.86%	10.27%	11.00%
2002	10.62%	10.58%	10.50%
2003	10.59%	10.35%	11.00%
Average	10.86%	10.31%	10.90%

These returns are consistent, there are no wild swings up or down, and, more importantly, there is no indication that returns will drop dramatically.

In contrast, the results produced by the versions of the finance models used by Staff and RUCO cost of capital witnesses are substantially less than the authorized, realized and forecasted returns on equity for these utilities:

Staff Cost of Equity Estimates	
DCF (Constant Growth)	8.4%
DCF (Multi-Stage)	9.6%
CAPM (Historic Risk Premium)	8.0%
CAPM (Current Risk Premium)	8.1%
Average	8.5%
RUCO Cost of Equity Estimates	
DCF	9.11%
CAPM (Geometric Mean)	6.79%
CAPM (Arithmetic Mean)	8.06%
Average	7.99%

Reiker Sb. (Ex. S-46), JMR-S7; Rigsby Dt. (Ex. R-5), Schedules WAR-3 and WAR-8.[19]

Obviously, something is wrong with the versions of the DCF model and CAPM used by Mr. Reiker and Mr. Rigsby when the results of their models produce returns substantially below the returns the sample group of water utilities is actually earning. Neither witness offers any credible explanation for this result. Instead, Mr. Reiker and Mr. Rigsby simply attack Dr. Zepp's version of the models, arguing that their respective models are correct, even though the results produced bear no resemblance to reality.

In contrast, Dr. Zepp's models do produce results that are consistent with recent authorized, realized and forecasted returns on equity for Staff's sample group of publicly-traded water utilities. Dr. Zepp's updated estimates, presented in his Rebuttal Testimony, are:

[19] Notably, Mr. Rigsby's final recommendation, 9.61%, is based solely on his DCF model estimate, i.e., he disregards the obviously low results produced by his version of the CAPM. TR at ____.

Dr. Zepp Cost of Equity Estimates	
DCF (Water Companies)	10.5%
Risk Premium (Past Water Utilities' ROEs)	11.0 – 11.2%
Risk Premium (Natural Gas Utilities' ROEs)	10.4 – 10.7%
Risk Premium (Moody's Gas Stock Index)	10.3 – 10.9%
Average	10.5 – 10.8%

Zepp Rb. (Ex. A-49) at 5-6, Update Table 24. The average of Dr. Zepp's estimates, 10.5% to 10.8%, are consistent with the actual data and forecasted returns for the water utility sample group, above.[20]

In short, the parties' witnesses have generally used established methods that rely on market data to estimate current cost of equity for their sample groups of publicly-traded companies. Morin, *supra*, at 28 ("There are four generic methodologies available to measure the cost of equity: DCF, Risk Premium, and CAPM, which are market-oriented, and Comparable Earnings, which is accounting oriented."). *See also*, Charles F. Phillips, Jr., *The Regulation of Public Utilities*, 394-99 (discussion of approaches commonly used to estimate the cost of equity). Regardless of the method used, however, it should produce results that are consistent with what utilities are actually earning. The evidence shows that only Dr. Zepp's cost of equity estimates are consistent with the actual data and forecasted returns.

D. The Rates of Return Recommended by Staff and RUCO Fail to Satisfy the Capital Attraction Standard.

1. Staff's Recommended Rate of Return of Only 6.5% Fails to Ensure Arizona-American's Financial Integrity.

Staff recommends a rate of return of only 6.5%, which is approximately equal to

[20] These equity cost estimates do not include the additional 50 basis points (0.5%) that, as discussed above, the Company, Staff and RUCO have agreed should be added to reflect the additional debt in the Company's capital structure.

the current cost of an investment grade utility bond. According to Staff, that rate of return, as applied by Staff to each water and wastewater district's OCRB, is sufficient to ensure Arizona-American's financial integrity and satisfy the capital attraction standard. *See* Reiker Dt. (Ex. S-45) at 30-31. In reality, it is apparent that Staff's recommendation will undermine Arizona-American's financial integrity, providing additional support for rejecting Staff's recommendation as unreasonably low and, ultimately, confiscatory.

In his Direct Testimony, Mr. Reiker argues that Staff's recommended rate of return results in a pre-tax interest coverage ratio of 3.2, which is approximately equal to the median interest coverage ratio for an A-rated electric utility. Reiker Dt. (Ex. A-49) at 30-31. The Company agrees with Staff that interest coverage, which measures the ability of a firm to make timely debt payments, is an important indicator of a company's financial integrity. Stephenson Rb. (Ex. A-74) at 28-29. However, Staff's recommended rate of return actually results in pre-tax interest coverage of approximately 1.0 – an indication of financial distress.

The Company submitted a schedule showing the calculation of its pre-tax interest coverage based on Staff's recommendation in its direct filing. Stephenson Rb. (Ex. A-40), Rebuttal Schedules 4 (page 1). As shown on that schedule, Staff's recommendation would produce total operating income and income taxes of $9,671,020 (including the Paradise Valley Water and Mohave wastewater districts), while Staff's annual interest expense is $8,361,302, producing a pre-tax interest coverage ratio of only 1.16.[21] Put simply, Staff's recommended rate of return would place Arizona-American in a break-even position: it would have sufficient funds to pay operating expenses and interest on its debt, but have no additional funds available to finance additional plant or to pay dividends to its shareholder. There can be no reasonable dispute that this recommendation would

[21] This calculation is based on Staff's direct filing. In its surrebuttal filing, Staff's revenue requirement was reduced by approximately $130,000, which would result in an even lower interest coverage ratio. Bourassa Rj. (Ex. A-24) at 9 and Rejoinder Exhibit 1.

violate the capital attraction standard.

2. Staff's Rates of Return on the Company's Fair Value Rate Are Confiscatory.

In contrast to the other parties to this proceeding, Staff did recommend fair value rate bases of each district. However, Staff did not apply its anemic 6.5% rate of return to those fair value rate bases to derive its recommended revenue requirement. Instead, as Mr. Carlson admitted, Staff backed into its rate of return recommendations, producing returns on its fair value rate bases that are unreasonably low – so low that Staff's returns are confiscatory.

The Company has discussed the fair value standard mandated by Article 15, Section 14 of the Arizona Constitution and by U.S. Supreme Court and Arizona Supreme Court on pages 4-17, above. Under that standard,

> It must be determined whether the rates complained of are yielding and will yield, over and above the amounts required to pay taxes and proper operating charges, a sum sufficient to constitute just compensation for the use of the property employed to furnish the service; that is, a reasonable rate of return on the value of the property at the time of the investigation and for a reasonable time in the immediate future.

McCardle, 272 U.S. at 408-09. Based on current and forecasted interest rates, it is apparent that Staff's recommendations for each district are unlawful.

	Staff RCND Rate Base	Staff Fair Value Rate Base
Sun City West Water	5.0%	5.7%
Sun City West Wastewater	4.7%	5.4%
Sun City Water	3.2%	4.2%
Sun City Wastewater	3.3%	4.3%
Agua Fria Water	5.9%	6.2%

Anthem Water	6.2%	6.3%
Agua Fria/Anthem Wastewater	6.3%	6.4%
Tubac Water	4.2%	5.1%
Mohave Water	4.7%	5.4%
Havasu Water	4.6%	5.4%
Staff's Average Return	4.8%	5.4%

Schedules DWC-1 (Ex. S-26 through Ex. S-35).

These returns, which range from 3.2% to 6.3% on Staff's RCRB for each district, and from 4.2% to 6.4% on Staff's fair value rate bases, are below the cost of intermediate and long-term debt instruments.

10-Year Treasury Rate (November 5, 2003)	4.4%
10-Year Treasury Rate (Forecasted – 2004)	4.9%
Long-Term Treasury Rate (November 5, 2003)	5.3%
Long-Term Treasury Rate (Forecasted – 2004)	5.7%

Zepp Rj. (Ex. A-50) Rejoinder Table 6. By comparison, the yield on these instruments is frequently used in the CAPM as the proxy for the risk-free rate. *See, e.g.*, Morin, *supra*, 308-10 (recommending use of market forecasts of rates on long-term Treasury bonds in implementing the CAPM). In other words, Staff's recommendation produces returns that are less than the return on a risk-free security.

In addition, it is apparent that the returns fluctuate because Staff has backed into them, as Mr. Carlson candidly admitted during cross-examination. TR at 1499, 1501-05. The Arizona Supreme Court has addressed this anomalous "backing in" technique, and has stated that it is "illegal":

> The company contends the commission . . . first determined what the company should be allowed to earn in order to maintain a sound financial position, attract necessary additions to capital and pay a fair return on common equity; and second, having thus established the amount the company should be allowed to earn for such purposes, it proceeded to adjust the rate of return to any rate base. *If this be true, it would be an illegal method of establishing a rate base.* The standard for establishing a rate base must be the fair value of the property and not what the commission might believe was a fair rate of return on common equity.

Simms, 80 Ariz. at 155, 294 P.2d at 385 (emphasis supplied). Similarly, in *Arizona Corp. Comm'n v. Citizens Utilities Co.*, 120 Ariz. 184, 584 P.2d 1175 (App. 1978), the Arizona Court of Appeals stated that the use of a "fluctuating" rate of return, that is adjusted as necessary to produce the same revenue requirement, is unlawful:

> Under our constitution, a utility is entitled to a fair rate of return on the fair value of its properties, "no more and no less." . . . *Dr. Langum [the Staff cost of capital witness] violated this principle by pegging his opinion as to rate of return to the finding of fair value.* This results in a fluctuating rate of return. Thus, under Dr. Langum's theory, it makes no difference whether the Commission used original cost or reproduction cost as the base, the amount of dollars in the Company's coffers is basically the same.

120 Ariz. at 190, n. 5, 584 P.2d at 1181, n. 5 (emphasis supplied), *quoting Arizona Water*, 85 Ariz. at 203, 335 P.2d at 415.

Clearly, the methodology employed by Staff in this case violates these decisions and, more generally, the fair value standard. Notably, neither Mr. Reiker nor Mr. Rigsby testified that their respective recommended returns should be adjusted based on the size of the rate base to which the return applies. In fact, neither of them suggested that the size of the rate base, or the manner in which it is derived, affected their cost of capital recommendations. RUCO's cost of capital witness, Mr. Rigsby, for example, testified that "the fact that we are using an original cost rate base never entered into any of my calculations or any of my analysis here. This is all, my analysis is based on market-based data." TR at 693. The finance models they have used – the DCF and the CAPM – are

based on data derived from stock market transactions (which is why publicly-traded companies must be used as proxies), and have nothing to do with the rate bases of the sample groups of publicly-traded utilities used to implement the models.

In short, virtually every tenet of fair value rate-making would be violated in case if Staff's (or RUCO's) recommendations were adopted by the Commission.

V. RATE DESIGN.

A. Staff's Inverted Tier Rate Design for the Company's Water District Should Be Rejected.

Given the size and complexity of this proceeding, Arizona-American is proposing to maintain the same rate designs as those previously approved by the Commission when the water and wastewater districts were owned and operated by Citizens, and that the necessary rate increases be allocated among all customers equally. *E.g.*, Kozoman Dt. (Ex. A-52) at 3-4 (Sun City water and wastewater districts); Kozoman Rb. (Ex. A-62) at 2-3. All of the parties are in agreement with this approach, which avoids the necessity of preparing cost of service studies for each district, except for Staff. Staff, in contrast, is recommending radical changes in the Company's rate design for its seven water districts. For the reasons explained below, Staff's new rate design, which is not supported by a cost of service study or similar analysis, should be rejected.

With respect to the Company's water districts, Staff proposes a three-tier, inverted block rate structure with break points at 4,000 gallons and at 100,000 gallons of water use. Rogers Dt. (Ex. S-36) at 5. Notably, these same break points would be used to design rates for ***all*** seven water districts and, moreover, would apply to ***all*** classes of customers and meter sizes. In other words, a residential customer on a 5/8-inch meter who uses 8,000 gallons of water per month is treated the same way as a commercial customer on a 4-inch meter that uses 200,000 gallons of water per month. *Id.* at 6.[22] This rate design,

[22] Under Staff's proposal, only construction, irrigation and fire protection customers

which is not supported by a cost of service study or any detailed billing analysis, is not conservation oriented, but will, instead, simply shift the recovery of revenues from customers on small meters to customers on large meters.

Staff attempts to justify the discounted rate applicable to the first 4,000 gallons of use by claiming that "it supports the state-wide effort to improve water use efficiency." *Id.* However, as Mr. Kozoman explained in his rebuttal testimony, this reasoning is nonsensical: "Selling water to all customers at a discounted rate, that is, a rate below the cost of service, does not encourage 'water use efficiency.' In reality, this sort of discount will encourage inefficient water use by sending the wrong price signal, particularly since the discounted commodity rate is applicable to all customers." Kozoman Rb. (Ex. A-62) at 4-5.

Staff also contends that the creation of this discounted rate block would be akin to a "lifeline" rate. Rogers Dt. (Ex. S-36) at 6. However, as Mr. Kozoman explained, "lifeline" and other types of discounted rates are contrary to basic cost of service principles and produce a subsidy that must be recovered by means of higher rates and other usage blocks and, therefore, should only be available to residential customers who meet income eligibility requirements. Kozoman Rb. (Ex. A-62) at 5-6. In addition, discounted rates should not be considered unless the total cost of water service is high relative to other, similar water utilities, or where a significant percentage of residential customers are believed to be unable to afford water service. *Id.* at 6. Finally, and perhaps most importantly given the ostensible purpose of Staff's rate design, "lifeline" rates and similar types of discounted rates should not be used in areas where there are water shortages or where water use is a concern. *Id.*

The American Water Works Association ("AWWA") warns that these types of

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would be exempt. Those customers would continue to pay a monthly minimum charge and a flat commodity rate. *Id.*

discounted rates "may encourage greater use among the eligible customers and therefore be inconsistent with the need to reduce water consumption. In this case, the benefits to customers whose water costs might be reduced would have to be weighed against water use concerns." AWWA, *Alternative Rates (Manual 34)* at 11.[23] The AWWA also states that discounted rates "provide no conservation or water reduction incentive to those that receive the subsidy. Since water is sold below cost, the pricing incentive to reduce consumption is lessened. . . . The impact on demand should be carefully considered in areas where water supplies are scarce." *Id.* at 13.

Staff's use of a uniform break point between the middle and upper commodity rate tiers of 100,000 gallons per month is similarly flawed. Staff claims that using a break point of 100,000 gallons "sends an economic signal to potential new customers that consumption at this level is high compared to other customers on the system and is being discouraged." Rogers Dt. (Ex. S-36) at 6. However, whether such usage is in fact "high" will depend on a variety of different factors, none of which have been investigated by Staff. For example, is water use of 150,000 gallons per month by a school or hospital "high," as compared to a residential customer who uses 80,000 gallons of water per month? The reality is that Arizona-American's customer base consists of approximately 88% to 92% residential customers, depending on the water district, and few, if any, of those customers' monthly water usage will ever reach 100,000 gallons. As explained by Mr. Kozoman, if Staff's goal is to encourage water conservation while promoting economic efficiency, as Staff witness Dennis Rogers has testified, a much better approach would be to design rates that are directed at high water users in each customer class:

> If the customer base is primarily residential, higher volume uses could typically be associated with extensive lawn watering and filling of swimming pools. In this case, an inverted-block rate would charge these uses at higher rates.

[23] The chapter from this publication that deals with "lifeline" rates and low-income discounts is attached to Mr. Kozoman's rebuttal testimony as Rebuttal Exhibit 1.

> Since some of these uses (lawn watering for example) may also cause higher peak seasonal demands, an inverted-block rate may recover costs in proportion to use more approximately than other rate forms.

AWWA, *Alternative Rates* at 18 (Ex. A-91). Similarly, Youngtown witness Michael Burton testified:

> I'm not opposed to conservation rates; I do them all the time. I develop a lot of conservation rates and have given papers on how they should be developed. But I believe if you look at the bill frequency analysis of the utility, you will find a substantial amount of water use probably that has discretion over it in probably the 8 to 20,000 gallon a month range. . . .
>
> So it's really going to not necessarily achieve the same kind of goals that you would like to have in a conservation rate as if you applied it down in the ranges where residential usage is going towards irrigation on lawns. That's really where you get your bank for your buck in terms of discretionary use in irrigation rate. Above 100,000, you will have a lot of commercial customers probably who have very little discretion. A hospital or a fruit packing company or whatever it might be that's using a lot of water, it is simply going to penalize them. It's not going to incent them to use less water. To do that I think you need to get that structure down in those ranges I was speaking about.

TR at 1301-02. *See also* Kozoman Rb. (Ex. A-62) at 8. Indeed, Mr. Rogers admitted during cross-examination that Staff's rate design would not reduce consumption, and that the rate design will primarily impact future commercial and industrial customers. TR 1099-01, 1114-15.

Mr. Kozoman prepared cost of service studies in order to evaluate the impact of Staff's proposed rate design, using the revenues, expenses, plant, cost of debt and equity proposed by Staff. Kozoman Rb. (Ex. A-62) at 9-20 and Rebuttal Schedules G-1 through G-9. These cost of service studies demonstrated, among other things, that Staff's rate design would result in customers on larger meter sizes paying substantially more than Staff's recommended rate of return, while customers on small meters would be paying substantially less than Staff's recommended rate of return, i.e., customers on larger meters

would be subsidizing customers on smaller meters. *Id.* at 22-26. As summarized by Mr. Kozoman:

> If the purpose of Staff's rate design is to encourage water conservation, then Staff has failed. This rate design does not encourage conservation because of the initial 4,000 gallon discounted rate block, and may destabilize revenues and the Company's earnings because a significant portion of the revenue requirement would be shifted to a relatively small number of customers using over 100,000 monthly. If those customers do conserve (or leave the system), the Company's revenue may decline substantially. This is a very poor rate design.

Id. at 27. *See also* AWWA *Alternative Rates* at 18-19. In designing inverted-block rates, "a full billing analysis and a study of the impacts on various customers" should be performed, as well as an "analysis of possible consumption and revenue impacts."). Accordingly, Staff's recommended rate design must be rejected.

B. The Company's Alternative Proposal for a Conservation-Oriented Rate Design.

Arizona-American does not believe it is necessary or appropriate to implement a radical change in its rate design for its seven water districts in this case. Four of the water districts already have two-tier, inverted block rates, the Anthem water district uses surface water from the Colorado River, and the remaining water districts, Mohave and Havasu, are outside an active management area. Nevertheless, if the Commission believes that the implementation of a conservation-oriented rate design is needed, the Company has developed an alternative rate design using inverted-block rates. This rate design, discussed below, is similar to the inverted-block rate structure proposed by Staff. However, in contrast to Staff's proposal, different rate structures are proposed for residential and for general metered non-residential customers. Under this approach, rates can be better designed to encourage large-volume customers *within each class* to reduce their water usage. The break-over points and rate blocks within each class are set to

reflect the usage characteristics of that class, as explained below.

Attached at Tab A are schedules prepared by the Company's rate design witness, Ronald L. Kozoman, illustrating this alternative rate design. In order to develop these rates, the Company has used the revenue requirement for each water district based on the Company's rejoinder filing. *See* Bourassa Rj. (Ex. A-24), Rejoinder Schedules. Obviously, the specific monthly minimums and commodity rates shown in the schedules would change if different revenue requirements are authorized by the Commission. However, the Company believes the approach described below is a reasonable alternative, and will agree to its implementation in this case.

1. Monthly Minimum Charges.

The monthly minimum charges for all customer classes are determined by meter size and are based on 65% of the monthly minimum charges computed in the cost of service studies prepared by Mr. Kozoman, which are attached to Mr. Kozoman's Rebuttal Testimony (Ex. A-62). These monthly minimum charges are based on *Staff's* original cost rate base, accumulated depreciation and expense levels. For this reason, the monthly minimum charges in the attached schedules are conservative. Except as discussed below, no gallons of water are included in the monthly minimum charges, i.e., there is no "free" water.

For the Mohave and Havasu water districts, the monthly minimum charge for multi-family residential customers (e.g., apartment complexes and mobile home parks) is based on the computed monthly minimum charge for a 5/8-inch meter multiplied by the number of units in the complex. Similarly, in those water districts, monthly minimum charges for multi-unit commercial customers (e.g., strip shopping centers) are based on the monthly minimum charge for a 5/8-inch meter multiplied by the number of units in the complex. In addition, for all multi-family residential and multi-unit commercial customers, 1,000 gallons of water will continue to be included in the monthly minimum

charge. The total gallons included in each customer's minimum monthly billing will be equal to 1,000 gallons multiplied by the number of units.

2. Inverted-Block Commodity Rates.

a. Development of Break-Over Points and Water Use Tiers.

All residential customers will have a three-tier inverted-block commodity rate. The break-over points between the three tiers are set at approximately 33% and 67% of the consolidation factor. Each water district will have its own set of break-over points based on that district's test year water use characteristics. The break-over points for each water district are shown on the attached schedules. The same break-over point will apply to all residential customers in the district, regardless of meter size. This will address (among other things) the problem in the Anthem water district, where some residential customers are required to have 1-inch meters for interior fire sprinklers, regardless of their normal water use. TR at 266-68.

All non-residential general metered customers[24] will have a two-tier inverted-block commodity rate. In contrast to residential customers, the break-over points for these customers will vary based on meter size, again with each water district having its own set of break-over points based on its customers' water use characteristics. The break-over points are based on 60% of the relevant consolidation factor for each meter size. (If there are no customers being served by a particular sized meter, the Company has used the next size smaller meter size tier, divided by the gallons per minute flow and multiplied by the gallons per minute flow of the meter size tier being computed.) This results in a more equitable rate design, as opposed to treating commercial customers on 3/4-inch and 1-inch meters the same as commercial customers on 4-inch and 6-inch meters, as Staff has done.

[24] Multi-family residential (Mohave and Havasu districts) and multi-unit commercial customers (Mohave district) are excluded from non-residential general metered customers and are treated differently, as explained below.

Multi-family residential customers in the Mohave and Havasu water systems have a three-tier inverted-block commodity rate. The break-over points for these customers is based on the consolidation factors for the residential customer class of each district, multiplied by the number of families served in an individually metered complex. Multi-unit commercial customers in the Mohave district have a two-tier inverted-block commodity rate. The break-over point for these customers is based on the consolidation factor for the 5/8-inch commercial meter multiplied by the number of units served.

b. Development of Commodity Rates.

For residential customers, the commodity rate applicable to all gallons in the first (lowest) tier would be equal to 70% of the base rate.[25] The commodity rate applicable to usage in the second (middle) tier is equal to 120% of the base rate, while the commodity rate applicable to usage in the third (highest) tier is equal to 180% of the base rate. Specific commodity rates have been computed for each residential tier for each water district, based on the Company's rejoinder revenue requirement, as shown in the attached schedules.

For all non-residential general metered customers, the commodity rate applicable to all usage in the first (lower) tier is equal to 120% of the base rate. The commodity rate for usage in the second (upper) tier is equal to 180% of the base rate. Again, specific commodity rates have been computed for each tier for each water district, as shown in the attached schedules. However, as discussed above, while the commodity rates for the first and second tiers will be uniform for each district, the break-over points vary for non-residential general metered customers by meter size.[26]

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[25] The base rate is the commodity rate that produces the Company's rejoinder revenue requirement, using the computed residential and commercial tiers and percentage of the base rate.

[26] For Sun City and Mohave only, the break-over points were computed for the customer class as a whole, rather than by meter size. The break-over point for the irrigation customer class in Sun City was also computed as a class rather than by meter size.

For multi-family residential customers in the Mohave and Havasu systems, the commodity rates will be equal to 70% of the base rate in the first tier, 120% in the second tier, and 180% of the base rate in the third tier. For the multi-unit commercial customers in the Mohave system, the commodity rates will be equal to 120% in the first tier, and 180% in the third tier.

c. Other Customer Classes.

Special classes of customers, such as customers purchasing water from the Company for resale and construction uses, will pay a monthly minimum charge based on the size of the meter from which the water is provided. Additionally, these customers will pay a commodity rate based on 180% of the base rate.

C. Other Rate Design Issues.

In Decision No. 65655 (Feb. 20, 2003), the Company was ordered by the Commission to submit for approval a Low Income Program, which would apply only to customers in Sun City and Sun City West. This program would relieve qualifying low income residential customers on 5/8-inch and 3/4-inch meters from paying the surcharge approved in Decision No. 65655 associated with the use of Central Arizona Project water in those districts. Rogers Dt. (Ex. S-36) at 4; Kozoman Rb. (Ex. A-62) at 2. Because this program is related to the surcharge to recover the costs associated with utilizing Central Arizona Project water in those two district, it does not affect the revenue requirements or rate design in this case. Kozoman Rb. (Ex. A-62) at 2. All of the parties are in agreement that this program conforms with the requirements of Decision No. 65655 and should be approved.

The Company has also proposed to modify its service line and meter installation charges for each water district to match the recommended charges set forth in a memorandum issued by the Staff Engineering Section, dated April 23, 2003. A copy of this memorandum is attached to Mr. Kozoman's Direct Testimonies as Exhibit 1.

Additionally, the Company proposes to collect the income taxes associated with its collection of service line and meter installation charges because these charges (although treated as refundable advances for regulatory purposes) have been interpreted by the Internal Revenue Service to constitute taxable income. Kozoman Dt. (Ex. A-52) at 10. Staff has agreed that the Company's proposed modifications to service line and meter installation charges for its water districts are reasonable and should be approved. Rogers Dt. (Ex. A-36) at 9. Again, it should be noted that because service line and meter installation charges are not revenue, the modification of these charges does not affect the Company's revenue requirement for its water districts.

Finally, Youngtown has requested that it be reclassified from a commercial customer to an irrigation customer with respect to water deliveries provided to Maricopa Lake, which is owned and operated by Youngtown as a recreational facility. *See* Burton Dt. (Ex. Y-5) at 13-14. The Company does not object to this reclassification. However, it should be understood that because the Company's irrigation rate in Sun City is lower than its general rate for non-residential (i.e., commercial and industrial) customers, the reclassification will result in a reduction in revenue and will require other customers to make up for the revenue shortfall. Kozoman Rb. (Ex. A-62) at 35.

D. Arizona-American's Proposed Cost Recovery Mechanism for Increased Costs Under the Tolleson Agreement Should Be Approved.

1. Background.

Arizona-American's Sun City wastewater district does not own or operate a wastewater treatment plant. Instead, the Company delivers wastewater from this system to the regional treatment plant located in and owned and operated by the City of Tolleson ("Tolleson WWTP"). TR at 733, 1151-52, 1465. In 2001, the Company delivered and Tolleson treated 1,580 million gallons of wastewater from Arizona-American customers at an average rate of more than 4.5 million gallons per day. TR at 1152; Kuta Dt. (Ex. A-

36) at 6. The treatment of wastewater flows from the Sun City wastewater district at the Tolleson WWTP takes place pursuant to the parties' Sewage Treatment And Transportation Service Agreement dated June 21, 1985 ("Tolleson Agreement"), as amended. *Id.*

Historically, and during the test year, Arizona-American made three separate types of payments to Tolleson under the Tolleson Agreement. Kuta Dt. (Ex. A-37) at 6-7. Rate Component One is a fixed annual "usufructory" or user charge related to bond financing issued by the City to pay for the original plant additions Tolleson made in order to receive and treat wastewater flows from Sun City. Rate Component Two is a monthly O&M charge based on the Company's proportionate share of the City's actual O&M costs based on actual flows. Rate Component Three was a $1,500 monthly payment for replacement and contingencies reserve up to an aggregate balance of $90,000. *Id.*

Following completion of a Wastewater Treatment Plant Infrastructure Assessment Phase I Study performed by Brown and Caldwell in 2001 for Tolleson, it was determined that the aging Tolleson WWTP is in need a major repair and improvement. *Id.* at 7. Presently, Tolleson is undertaking a substantial facility improvement plan and anticipates spending $40 million on capital projects through 2008. As a consequence, and in order to ensure the continuation of wastewater treatment for customers in Sun City, the Company and Tolleson began negotiating an amendment to the Tolleson Agreement in early 2002 and executed the Third Amendment to the Tolleson Agreement on April 22, 2003. Kuta Supp. Dt. (Ex. A-41) at 3. The Third Amendment provides a mechanism for Tolleson to collect and Arizona-American to pay the increased costs associated with these necessary repairs and improvements to the facility. Ex. S-1.

Specifically, the Third Amendment modifies Rate Component Three, the replacement and contingencies reserve, by increasing it from $1,500 to $20,000 per month up to an aggregate balance of $200,000, increased from $90,000. *Id.; see also* Kuta Supp.

Dt. (Ex. A-41) at 4. Although this reserve is to be used only to replace and repair facilities with a useful life of no more than ten years, due to the age of the Tolleson plant, it is expected that Arizona-American will incur the maximum charge under Rate Component Three each year. *Id.* The Third Amendment also creates a new rate component – Rate Component Four – providing for payment of Arizona-American's pro rata share of certain major capital improvement projects, estimated to be roughly $10 million. *Id.* at 7-8.

Contributing to improvement of the Tolleson WWTP is beneficial to the Company's Sun City wastewater district customers. TR at 1153-56; Schneider Rj. (Ex. A043) at 14. Construction of a wastewater treatment facility would require the Company to secure a location for a wastewater treatment plant and it would be, at best, difficult to locate such a large parcel of property, particularly in the Sun City area. Furthermore, there are numerous regulatory hurdles involved in the construction of a wastewater treatment plant, including compliance with a number of federal and state laws, and also zoning and other land use regulations. *Id.* Compliance with all of the applicable governmental requirements would require a substantial amount of time, up to 20 years, and the total cost of such a facility would likely exceed $35 million. TR at 1155-56. In short, the Tolleson Agreement remains the most reasonable and prudent means of obtaining wastewater treatment for the Company and its Sun City wastewater district customers.

2. The Company's Proposed Tolleson Cost Recovery Mechanism Is Fair and Equitable.

Arizona-American requires a means of recovering the significant cost increases resulting from the Third Amendment because such costs have arisen outside the test year.[27] Accordingly, Arizona-American proposed a rate recovery mechanism, specifically

[27] Notably, during the test year, the Company also executed the West Trickling Filter

a cost adjuster mechanism, that would allow for recovery of the increased costs related to the Tolleson Agreement. Bourassa Dt. (Ex. A-1) at 8-11. Under the Company's proposal, an amortized portion of the actual payments made by the Company to Tolleson under Rate Components Three and Four (amortization period is equal to the remaining life of the agreement), plus the annual carrying cost of any associated debt (interest expense less the income tax savings on the interest component), will be recovered via an adjustment to the rates. *Id.* at 9-10. For example, assume in year one, $1 million was paid and the remaining life of the agreement is 25 years. Also assume, in year two $1.5 million was paid and the remaining life of the agreement is 24 years. In year two, the cost recovery will be 1/25th of $1 million, or $40,000, plus the actual annual interest paid on the debt service. In year three, the cost recovery would be 1/25th of $1 million, or $40,000, plus 1/24th of $1.5 million, or $62,500, plus the actual annual interest paid on the debt service, which total would be added to the annual revenue requirement. Bourassa Dt. (Ex. A-1) at Bourassa Dir. Exh. 1.

Adjustment mechanisms are not improper. The Company already utilizes an adjuster mechanism in its Sun City water district to allow for the recovery of costs associated with purchasing CAP water. TR at 145-46, 209; Bourassa Rj. (Ex. A-24) at 19-20. The proposed cost adjuster mechanism makes sense because, while the liability to pay the increased costs under the Third Amendment is certain, the costs are not yet fixed in amount or date of payment. TR at 145-46. However, like the costs of CAP water, such costs are significant, variable and outside the Company's control. Thus, the adjuster mechanism allows the Commission to ensure that ratepayers pay only the actual costs

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Media Replacement Project Agreement memorializing a contractual arrangement whereby Arizona-American paid its pro rata share of the cost of replacing, on an expedited basis, a deteriorated trickling filter media associated with the Tolleson plant. Bourassa Dt. (Ex. A-1) at 7-8. The ratemaking treatment of this matter is not in dispute.

incurred by Arizona-American for necessary wastewater treatment. At the same time, the Company will have the certainty necessary to finance and pay substantial amounts to Tolleson in order to ensure continued treatment of wastewater. In this light, the proposed Tolleson cost recovery mechanism is substantially similar to the Company's CAP cost recovery mechanism.

Nevertheless, Staff and RUCO oppose approval of the Company's proposed Tolleson cost recovery mechanism. In essence, Staff and RUCO cling to ratemaking theory in order to delay full recovery of the costs of the Tolleson Agreement for the benefit of customers and to the direct detriment of Arizona-American. For example, RUCO argues that the amounts being paid are not currently known and measurable. Diaz-Cortez Dt. (Ex. R-7) at 29-30. To begin with, the evidence is undisputed that Arizona-American is now, and since May 2003 has been paying $20,000 per month under Rate Component Three. Schneider Rj. (Ex. A-43) at 13. Therefore, this component of the Third Amendment is known and measurable.[28] Moreover, as stated above, while the exact amount to be paid under Rate Component Four is not yet certain, the obligation to pay amounts to Tolleson estimated at $10 million is known. Most importantly, the Company would only recover amounts actually paid under the recommended cost recovery mechanism, subject to the amortization of such amounts over the life of the Tolleson Agreement, further minimizing the impact on ratepayers. *E.g.,* TR at 1479-80. Thus,

[28] RUCO and Staff attempted to argue that the liability under paid Rate Component Three remains uncertain because it is subject to an aggregate cap. TR at 739-40, 1469. However, the Third Amendment did not create the aggregate cap, it merely increased the cap established in the original Tolleson Agreement. *Id.* Neither RUCO nor Staff oppose recovery of the test year costs under Rate Component Three, which costs were incurred subject to a cap on the payment of the contingency reserve. TR at 734, 1466. Furthermore, neither party produced any evidence, except unsupported speculation, to dispute Arizona-American's testimony that it fully anticipates incurring the maximum charge under Rate Component Three each month due to the substantial needs for upgrades at the Tolleson WWTP. *See* TR at 1479.

ratepayers are protected from over recovery.[29]

Staff and RUCO's reliance on the recently issued Accounting Order also provides no basis to postpone recovery of the increased costs being incurred under the Tolleson Agreement. The accounting treatment and cost recovery in rates are mutually exclusive issues. The Accounting Order merely allows Arizona-American to defer the costs for consideration of rate recovery, costs Arizona-American began incurring immediately after the Third Amendment was executed, between the date of the Accounting Order and issuance of an order allowing recovery. *See* Decision No. 66386 (Oct. 6, 2003) Yet, the Accounting Order does not provide for cost recovery or in any way guarantee cost recovery and, in fact, has no impact on the Company's ultimate recovery of such costs. *Id.; see also* TR at 742-743, 1470.

Finally, rejection of the Company's proposed cost recovery mechanism is unfair, unsound policy and threatens the Company's financial integrity. Staff and RUCO agree that Arizona-American's agreement with Tolleson is beneficial to ratepayers. In response, Staff and RUCO would reward the Company for such decisions by recommending denial at rate relief until some unknown time in the future. Even worse, both Staff and RUCO recommend rate reductions for the Sun City wastewater district. Facing an average annual cost of $2,000,000 over the next 4-5 years under Rate Component Four, and a more than 1300% annual increase in Rate Component Three, Staff and RUCO recommend an operating income for the Sun City wastewater district of $580,000 and $604,070, respectively. TR at 1511; Moore Sb. (Ex. R-4) at Surrebuttal Exhibit RLM-1. It should therefore be obvious that Arizona-American is going to be unable to pay for these costs through revenues from wastewater customers, which, in turn, will likely diminish the amount of capital available for other capital improvement

[29] As with all surcharge or adjuster mechanisms, the Company anticipates annual reporting to the Commission and cost verification by Staff.

projects intended or even necessary to benefit customers.

In response to this anomalous situation Staff and RUCO assert this is no different than any other capital expenditure Arizona-American would make to build plant. Diaz-Cortez Sb. (Ex. R-8) at 15; Carlson Sb. (Ex. S-48) at 10-11. However, Arizona-American is not making an investment to build plant, it is paying expenses incurred under a contract, like an O&M contract, to obtain wastewater treatment services for its ratepayers. Schneider Rj. (Ex. A-43) at 13-14. The Company will not own the plant and has no control over the timing of the investment and almost no ability to control the total cost. In fact, under Commission Decision No. 66386 (October 6, 2003), these costs are currently being recorded as a deferred debit (NARUC Account 186.2) and not as the Company's plant investment. *Id.* Indeed, Staff and RUCO appear unwilling to treat the amounts incurred by the Company as if it were truly plant investment. *See TR* at 750 (AFUDC improper because Arizona-American not building the plant); 1486-87 (no return on investment unless Tolleson pays Company a return). Thus, if successful in delaying recovery of the increased costs imposed under the Tolleson Agreement, Staff and RUCO appear poised to seek the best of both worlds for ratepayers—delay recovery now and then minimize recovery later. Obviously, this is fundamentally unfair. In contrast, the cost recovery mechanism proposed by the Company recovers only the Company's actual costs and, therefore, is fair to both Arizona-American and its ratepayers in the Sun City wastewater district and should be adopted.

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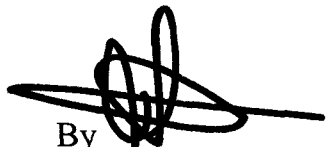
RESPECTFULLY SUBMITTED this 4th day of February, 2004.

FENNEMORE CRAIG



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An original and 21 copies of the foregoing and attachments were delivered this 4th day of February, 2004, to:

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A copy of the foregoing and attachments were hand-delivered this 4th day of February, 2004, to:

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Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates

Rejoinder Revenue Requirement 6,307,026
Computed Revenues, from Proposed Rates 6,306,959

Percent Increase over Present Rates **2.00%**

Line No.		Present Monthly Minimums	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) 33.00% Tier One Break-Point	(c) 67.00% Tier Two Break-Point	Tier Three Break-Point	(d) 70% Tier One Rate (Rounded)	(d) 120% Tier Two Rate (Rounded)	(d) 180% Tier Three Rate (Rounded)	Present Revenue	Proposed Revenue	Dollar Increase	Percent Increase
1	Residential Rates:																
2	5/8 Inch	$ 10.00	45.88%	$ 21.17	$ 13.76	65.00%	0	4,000	10,000	10,001	$0.998	$1.711	$2.567	3,329,615	3,485,141	155,527	4.67%
3	3/4 Inch	15.00	0.51%	27.60	17.94	65.00%	0	4,000	10,000	10,001	0.998	1.711	2.567	37,804	38,346	542	1.43%
4	1 Inch	25.00	5.59%	40.46	26.30	65.00%	0	4,000	10,000	10,001	0.998	1.711	2.567	409,459	413,669	4,210	1.03%
5	1 1/2 Inch	53.00	1.41%	72.62	47.20	65.00%	0	4,000	10,000	10,001	0.998	1.711	2.567	83,967	90,294	6,328	7.54%
6	2 Inch	80.00	5.97%	111.21	72.29	65.00%	0	4,000	10,000	10,001	0.998	1.711	2.567	372,404	406,191	33,787	9.07%
7	3 Inch	155.00	0.00%	201.26	130.82	65.00%	0	4,000	10,000	10,001	0.998	1.711	2.567	-	(0)		
8	4 Inch	200.00		329.90	214.44	65.00%	0	4,000	10,000	10,001	0.998	1.711	2.567				
9	6 Inch	400.00		651.49	423.47	65.00%	0	4,000	10,000	10,001	0.998	1.711	2.567				
10	8 Inch	800.00		1,092.39	710.05	65.00%	0	4,000	10,000	10,001	0.998	1.711	2.567				
11																	
12	Computed Charge per 1,000 gallons of Water				**$ 1.42620**												
13																	
14	**Tier 1 Present Rate**			$ 1.78													
15	**Tier 2 Present Rate**			$ 2.24													

Line No.		Present Monthly Minimums	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) 60.00% Tier One Break-Point	Tier Two Break-Point	(d) 120% Tier One Rate	(d) 180% Tier Two Rate	Present Revenue	Proposed Revenue	Dollar Increase	Percent Increase
16															
17															
18															
19															
20	Commercial Rates:														
21	5/8 Inch	$ 10.00	0.05%	$ 21.17	$ 13.76	65.00%	0	16,000	16,001	$1.711	$2.567	4,830	5,772	943	19.52%
22	3/4 Inch	15.00	0.07%	27.60	17.94	65.00%	0	175,000	175,001	1.711	2.567	3,945	4,082	137	3.47%
23	1 Inch	25.00	0.48%	40.46	26.30	65.00%	0	35,000	35,001	1.711	2.567	34,250	33,783	(467)	-1.36%
24	1 1/2 Inch	53.00	1.60%	72.62	47.20	65.00%	0	87,000	87,001	1.711	2.567	106,451	97,111	(9,340)	-8.77%
25	2 Inch	80.00	6.15%	111.21	72.29	65.00%	0	207,000	207,001	1.711	2.567	391,368	356,832	(34,536)	-8.82%
26	3 Inch	155.00	5.74%	201.26	130.82	65.00%	0	565,000	565,001	1.711	2.567	357,919	321,689	(36,230)	-10.12%
27	4 Inch (1)	200.00		329.90	214.44	65.00%	0	882,813	882,814	1.711	2.567				
28	6 Inch	400.00	2.92%	651.49	423.47	65.00%	0	1,857,000	1,857,001	1.711	2.567	163,506	150,995	(12,512)	-7.65%
29	8 Inch (1)	800.00		1,092.39	710.05	65.00%	0	2,971,200	2,971,202	1.711	2.567				
30															
31	3 Inch Public Interruptible				Zero		Contract Rate			$ 1.00		4,838	4,838	-	0.00%
32	6 Inch Public Interruptible		13.79%		Zero		Contract Rate			$ 1.00		200,969	200,969	-	0.00%
33	8 Inch Public Interruptible		3.50%		Zero		Contract Rate			$ 1.00		71,829	71,829	-	0.00%
34	10 Inch Public Interruptible		0.37%		Zero		Contract Rate			$ 1.00		0	0		
35															
36	4 Inch Prison	200.00	5.95%		200.00					$2.142		248,933	263,823	14,890	5.98%
37	Totals Water Sales		100.00%												

38 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
39 **(b)** Percent of Computed Monthly Minimum
40 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
41 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12.
42 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
43 **(1)** Tier computed for 4 inch Commercial Meter computed by diviiding meter flow from of 3 Inch of 320 gpm multiplied by 500 gpm. For 8 Inch meter, 6 Inch meter flow divided by 1,000 gpm multiplied by 1,600 gpm.

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates
Page 2

Line No.		Present Monthly Minimums	Proposed Monthly Minimums	Present Revenue	Proposed Revenue	Dollar Increase	Percent Increase
1	4 Inch Private Fire	30.00	30.30	3,960	4,000	40	1.00%
2	6 Inch Private Fire	45.00	45.45	12,420	12,544	124	1.00%
3	8 Inch Private Fire	60.00	60.60	5,040	5,090	50	1.00%
4	10 Inch Private Fire	120.00	121.20				
5	12 Inch Private Fire	180.00	181.80				
6							
7	Miscellaneous Revenues			339,961	339,961	-	0.00%
8							
9	Total Revenues			6,183,467	6,306,959	123,492	2.00%
10							
11							
12	**Rate of Return at Present Rates From Cost of Service Study (Using ACC Staff Plant & Expenses)**						
13							
14							

15	Meter Size	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"
16	Rate of Return at Present Rates:								
17		9.03%	12.03%	17.68%	55.13%	48.11%	39.22%	70.20%	12.67%

18
19
20 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
21 **(b)** Percent of Computed Monthly Minimum
22 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
23 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12, Page 2.
24 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
25 **(1)** Tier computed for 4 inch Commercial Meter computed by diviiding meter flow from of 3 Inch of 320 gpm multiplied by 500 gpm. For 8 Inch meter, 6 Inch meter flow divided by 1,000 gpm multiplied by 1,600 gpm.

Arizona American - Agua Fria Water Division
Analysis of Revenue by Detailed Class, at Average Usage
Test Year Ended December 31, 2001

Rate Schedule Summary
Three Tier Rates
Bill Comparison

Line No.	Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch Residential	11,197	7,002	$ 22.46	$ 22.89	0.42	1.89%
2	3/4 Inch Residential	87	10,027	33.78	32.27	(1.51)	-4.48%
3	1 Inch Residential	542	17,634	60.82	60.15	(0.67)	-1.09%
4	1.5 Inch Residential	23	102,940	279.90	300.03	20.13	7.19%
5	2 Inch Residential	58	175,037	468.40	510.20	41.80	8.92%
6	3 Inch Residential	0	15,667	186.41	159.62	(26.79)	-14.37%
7	4 Inch Residential	-	-	-	-	-	0.00%
8	6 Inch Residential	-	-	-	-	-	0.00%
9	5/8 Inch Commercial	20	4,561	18.12	21.56	3.45	19.02%
10	3/4 Inch Commercial	8	14,989	44.90	43.59	(1.31)	-2.92%
11	1 Inch Commercial	36	22,823	72.44	65.35	(7.09)	-9.79%
12	1.5 Inch Commercial	31	89,393	249.56	202.20	(47.36)	-18.98%
13	2 Inch Commercial	84	125,151	356.66	286.42	(70.23)	-19.69%
14	3 Inch Commercial	52	188,454	573.46	453.27	(120.19)	-20.96%
15	4 Inch Commercial	-	-	-	-	-	0.00%
16	6 Inch Commercial	3	1,816,455	4,465.18	3,531.42	(933.75)	-20.91%
17	8 Inch Commercial	-	-	-	-	-	0.00%
18	2 Inch Public Interruptible	0	-	-	-	-	0.00%
19	3 Inch Public Interruptible	0	1,612,667	1,612.67	1,612.67	-	0.00%
20	4 Inch Public Interruptible	-	-	-	-	-	0.00%
21	6 Inch Public Interruptible	3	8,319,765	8,319.76	8,319.76	-	0.00%
22	8 Inch Public Interruptible	3	1,995,250	1,995.25	1,995.25	-	0.00%
23	10 Inch Public Interruptible	1	755,400	755.40	755.40	-	0.00%
24	4 Inch Prison	1	10,170,500	20,744.41	21,985.21	1,240.80	5.98%
25	Construction	-	-	-	-	-	0.00%
26	4 Inch Private Fire	7	-	30.00	30.30	0.30	1.00%
27	6 Inch Private Fire	20	-	45.00	45.45	0.45	1.00%
28	8 Inch Private Fire	6	-	60.00	60.60	0.60	1.00%
29							
30							
31	Totals	12,182					
32							
33	Actual Year End Number						
34	of Customers:	13,004					
35							

36 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates

Rejoinder Revenue Requirement 3,998,026
Computed Revenues, from Proposed Rates 3,998,031

Percent Increase over Present Rates **-0.21%**

Line No.		Present Monthly Minimums	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) 33.00% Tier One Break-Point	(c) 67.00% Tier Two Break-Point	Tier Three Break-Point	(d) 70% Tier One Rate	(d) 120% Tier Two Rate	(d) 180% Tier Three Rate	Present Revenue	Proposed Revenue	Dollar Increase
1	Residential															
2	5/8 Inch	$ 16.00	0.25%	$ 24.82	$ 16.13	64.99%	0	4,000	10,000	10,001	$ 0.656	$ 1.125	$ 1.688	3,606	2,788	(818)
3	3/4 Inch	$ 16.00	38.06%	37.23	24.20	65.00%	0	4,000	10,000	10,001	0.656	1.125	1.688	687,890	706,316	18,426
4	1 Inch	$ 32.00	28.57%	62.05	40.33	65.00%	0	4,000	10,000	10,001	0.656	1.125	1.688	748,944	758,361	9,417
5	1 1/2 Inch	$ 64.00	0.07%	124.10	80.67	65.00%	0	4,000	10,000	10,001	0.656	1.125	1.688	2,834	3,214	380
6	2 Inch	$ 80.00	6.56%	198.56	129.06	65.00%	0	4,000	10,000	10,001	0.656	1.125	1.688	61,222	59,613	(1,609)
7	3 Inch	$ 160.00	0.00%	397.13	258.13	65.00%	0	4,000	10,000	10,001	0.656	1.125	1.688			
8	4 Inch	$ 200.00	0.00%	620.51	403.33	65.00%	0	4,000	10,000	10,001	0.656	1.125	1.688			
9	6 Inch	$ 250.00		1,241.02	806.66	65.00%	0	4,000	10,000	10,001	0.656	1.125	1.688			
10	8 Inch			1,985.63	1,290.66	65.00%	0	4,000	10,000	10,001	0.656	1.125	1.688			
11																
12	Computed Charge per 1,000 gallons of Water				**$ 0.93750**											
13																
14	**Tier 1 Present Rate**			$ 2.00												
15	**Tier 2 Present Rate**			$ 2.00												
16								(c)								
17		Present		(a)		(b)		60.00%			(d)	(d)				
18		Monthly	Percent	Computed	Proposed	Percent of	Gallons	Tier	Tier		120%	180%				
19		Minimums	of Water	Monthly	Monthly	Computed	Included	One	Two		Tier	Tier				
20	Commercial		Sales	Minimums	Minimums	Monthly Minimums	In Minimum	Break-Point	Break-Point		One Rate	Two Rate				
21	5/8 Inch	$ 16.00	0.08%	$ 24.82	$ 16.13	64.99%	0				$ 1.125	$ 1.688				
22	3/4 Inch	$ 16.00	5.51%	37.23	24.20	65.00%	0	22,000	22,001		1.125	1.688		3,706	4,534	828
23	1 Inch	$ 32.00	2.17%	62.05	40.33	65.00%	0	5,332,500	5,332,501		1.125	1.688		53,466	40,682	(12,783)
24	1 1/2 Inch	$ 64.00	9.59%	124.10	80.67	65.00%	0	235,000	235,001		1.125	1.688		32,335	23,382	(8,953)
25	2 Inch	$ 80.00	5.64%	198.56	129.06	65.00%	0	221,000	221,001		1.125	1.688		114,250	101,106	(13,144)
26	3 Inch	$ 160.00		397.13	258.13	65.00%	0	4,892,500	4,892,501		1.125	1.688		39,029	39,063	33
27	4 Inch **(1)**	$ 200.00		620.51	403.33	65.00%	0	7,644,531	7,644,532		1.125	1.688				
28	6 Inch **(1)**	$ 250.00		1,241.02	806.66	65.00%	0	15,289,063	15,289,064		1.125	1.688				
29	8 Inch **(1)**			1,985.63	1,290.66	65.00%	0	24,462,500	24,462,501							
30																
31																

32 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
33 Cost of Service Study modified to include Payment in Lieu of Revenues from Del Webb, which was offset against all functions.
34 **(b)** Percent of Computed Monthly Minimum
35 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
36 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12.
37 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
38 **(1)** 4, 6, & 8 Inch Commercial Meter Tiers computed as 3 Inch tier divided by 320 gpm, multiplied by 500, 1000, & 1,600 gpm respectively.

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates
Page 2

Line No.			Present Monthly Minimums	Proposed Monthly Minimums	Tier One Rate	Tier Two Rate	Present Revenue	Proposed Revenue	Dollar Increase
1	Wholesale, 2 Inch Meter	1.37%	Zero	Zero	$ 2.160	$ 2.160			
2	Wholesale, 3 Inch Meter	0.01%	Zero	Zero	2.160	2.160	57,190	57,190	-
3	Wholesale, 6 Inch Meter	2.13%	Zero	Zero	2.160	2.160	61	61	-
4	Wholesale, 10 Inch Meter				2.160	2.160	20,135	20,135	-
5	Citizens Resources (Treatco)						226,872	226,872	-
6	Citizens Resources (Treatco) Revenue Annualization						(18,289)	(18,289)	-
7	Totals Water Sales	100.00%							
8									
9									
10	Private Fire Protection (Flat Rates)								
11	3 Inch		70.00	69.80					
12	4 Inch		90.00	89.75			3,330	3,321	(9)
13	6 Inch		135.00	134.00			19,440	19,296	(144)
14	8 Inch		180.00	178.59					
15	10 Inch		360.00	357.50					
16	Miscellaneous Revenues						1,950,387	1,950,387	-
17	Total Revenues						4,006,408	3,998,031	(8,377)
18									

Rate of Return at Present Rates From Cost of Service Study (Using ACC Staff Plant & Expenses)

Meter Size -->	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"
Rate of Return at Present Rates:								
	16.50%	7.16%	9.15%	38.58%	21.46%	32.29%	-3.64%	-4.84%

(a) Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
Cost of Service Study modified to include Payment in Lieu of Revenues from Del Webb, which was offset against all functions.
(b) Percent of Computed Monthly Minimum
(c) Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
(d) Percent of "Computed Charge per 1,000 gallons" on Line 12, Page 1.
(e) All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
(1) 4, 6, & 8 Inch Commercial Meter Tiers computed as 3 Inch tier divided by 320 gpm, multiplied by 500, 1000, & 1,600 gpm respectivley.

Arizona American - Anthem Water
(Formerly Known as Citizens Water Services / Water)
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001

Rate Schedule Summary
Three Tier Rates
Bill Comparison

Line No.	Customer Classification and/or Meter Size		(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch	Residential	8	10,212	$ 36.42	$ 25.86	(10.56)	-29.00%
2	3/4 Inch	Residential	1,642	7,753	31.51	31.05	(0.46)	-1.46%
3	1 Inch	Residential	1,096	8,719	49.44	48.26	(1.18)	-2.38%
4	1.5 Inch	Residential	3	7,361	78.72	87.08	8.35	10.61%
5	2 Inch	Residential	13	168,705	417.41	406.33	(11.08)	-2.65%
6	3 Inch	Residential						
7	4 Inch	Residential						
8								
9	3/4 Inch	Commercial	7	3,727	23.45	28.39	4.94	21.06%
10	1 Inch	Commercial	17	107,951	247.90	161.78	(86.13)	-34.74%
11	1.5 Inch	Commercial	3	263,879	591.76	393.79	(197.97)	-33.45%
12	2 Inch	Commercial	25	130,084	340.17	275.41	(64.76)	-19.04%
13	3 Inch	Commercial	9	201,964	563.93	485.34	(78.59)	-13.94%
14								
15								
16	2 Inch	Wholesale						
17	3 Inch	Wholesale	0	1,103,200	2,382.91	2,382.91	-	0.00%
18	6 Inch	Wholesale	1	2,364	5.11	5.11	-	0.00%
19	10 Inch	Wholesale	1	776,818	1,677.93	1,677.93	-	0.00%
20								
21	4 Inch	Fire Protection	3	-	90.00	89.75	(0.25)	-0.28%
22	6 Inch	Fire Protection	12	-	135.00	134.00	(1.00)	-0.74%
23								
24								
25								
26								
27		Totals	2,841					
28								
29		Actual Year End Number						
30		of Customers:	3,222					
31								

32 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates

Rejoinder Revenue Requirement 569,841
Computed Revenues, from Proposed Rates 569,791

Percent Increase of Present Rates **29.06%**

Line No.		Present Monthly Minimums	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) 33.00% Tier One Break-Point	(c) 67.00% Tier Two Break-Point	Tier Three Break-Point	(d) 70% Tier One Rate	(d) 120% Tier Two Rate	(d) 180% Tier Three Rate	Present Revenue	Proposed Revenue	Dollar Increase	Percent Increase
1	Residential:																
2	5/8 Inch	$ 10.00	60.67%	$ 22.03	$ 14.32	65.01%	0	3,000	10,000	10,001	$ 0.835	$ 1.432	$ 2.148	261,628	344,046	82,418	31.50%
3	1 Inch	$ 17.10	1.39%	41.34	26.87	64.99%	0	3,000	10,000	10,001	0.835	1.432	2.148	-	-		
4	1 1/2 Inch	$ 24.00	0.00%	73.53	47.80	65.00%	0	3,000	10,000	10,001	0.835	1.432	2.148	-	-		
5	2 Inch	$ 33.60	0.61%	112.16	72.91	65.00%	0	3,000	10,000	10,001	0.835	1.432	2.148	0	-		
6	3 Inch	$ 45.60	0.00%	202.30	131.49	65.00%	0	3,000	10,000	10,001	0.835	1.432	2.148	-	-		
7	4 Inch	$ 57.60	1.42%	331.06	215.19	65.00%	0	3,000	10,000	10,001	0.835	1.432	2.148	-	0		
8	6 Inch	$ 200.00	0.00%	652.97	424.43	65.00%	0	3,000	10,000	10,001	0.835	1.432	2.148				
9	8 Inch	$ 400.00		1,123.07	730.00	65.00%	0	3,000	10,000	10,001	0.835	1.432	2.148				
10																	
11	Computed Charge per 1,000 gallons of Water				**$ 1.1935**												
12																	
13	**Present Rates, Summer All Gallons**				$ 1.42												
14	**Present Rate, Winter All Gallons**				$ 1.31												

Line No.		Present Monthly Minimums	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) 60.00% Tier One Break-Point	Tier Two Break-Point	120% Tier One Rate	180% Tier Two Rate	Present Revenue	Proposed Revenue	Dollar Increase	Percent Change
15															
16															
17															
18															
19	Commercial														
20	5/8 Inch	$ 10.00	5.43%	$ 22.03	$ 14.32	65.01%	0	32,000	32,001	$ 1.432	$ 2.148	16,496	21,195	4,699	28.48%
21	1 Inch	$ 17.10	2.68%	41.34	26.87	64.99%	0	63,000	63,001	1.432	2.148	6,466	9,225	2,758	42.66%
22	1 1/2 Inch (1)	$ 24.00	1.36%	73.53	47.80	65.00%	0	126,000	126,001	1.432	2.148				
23	2 Inch	$ 33.60	12.55%	112.16	72.91	65.00%	0	55,000	55,001	1.432	2.148	3,194	5,566	2,372	74.27%
24	3 Inch	$ 45.60	1.41%	202.30	131.49	65.00%	0	1,534,500	1,534,501	1.432	2.148	25,194	34,200	9,006	35.75%
25	4 Inch	$ 57.60	0.00%	331.06	215.19	65.00%	0	128,000	128,001	1.432	2.148	3,820	6,550	2,730	71.46%
26	6 Inch (1)	$ 200.00		652.97	424.43	65.00%	0	4,795,313	4,795,314	1.432	2.148				
27	8 Inch (1)	$ 400.00		1,123.07	-	0.00%	0	7,672,500	7,672,505						
28															

29 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
30 **(b)** Percent of Computed Monthly Minimum
31 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
32 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12.
33 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
34 **(f)** For Multi-family, consolidation factors are the residential consolidation factors at 33% & 67% multiplied by families served.
35 **(1)** 1 1/2 Inch Meter Tier computed as 1 Inch tier divided by 50 gpm, and Multiplied by 100 gpm. 6, & 8 Inch Commercial Meter Tiers computed as 3 Inch tier divided by 320 gpm, multiplied by 1000, & 1,600 gpm, respectively.

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates
Page 2

Line No.	Multi-Family	Units Served	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) (f) 33.00% Tier One Break-Point	67.00% Tier Two Break-Point	Tier Three Break-Point	(d) 70% Tier One Rate	(d) 120% Tier Two Rate	(d) 180% Tier Three Rate	Present Revenue	Proposed Revenue	Dollar Increase	Percent Change
1	(1) Multi-Family	44	1.17%	22.03	$ 14.32	65.01%	44,000	132,000	440,000	440,001	$ 0.835	$ 1.432	$ 2.148	7,203	8,980	1,776	24.66%
2	(1) Multi-Family	56	0.86%	22.03	14.32	65.01%	56,000	168,000	560,000	560,001	0.835	1.432	2.148	7,741	9,289	1,548	20.00%
3	(1) Multi-Family	64	1.53%	22.03	14.32	65.01%	64,000	192,000	640,000	640,001	0.835	1.432	2.148	10,065	11,558	1,494	14.84%
4	(1) Multi-Family	65	1.18%	22.03	14.32	65.01%	65,000	195,000	650,000	650,001	0.835	1.432	2.148	9,406	11,157	1,751	18.62%
5	(1) Multi-Family	67	2.23%	22.03	14.32	65.01%	67,000	201,000	670,000	670,001	0.835	1.432	2.148	11,990	13,559	1,570	13.09%
6	(1) Multi-Family	89	1.87%	22.03	14.32	65.01%	89,000	267,000	890,000	890,001	0.835	1.432	2.148	13,438	15,174	1,736	12.92%
7	(1) Multi-Family	102	0.98%	22.03	14.32	65.01%	102,000	306,000	1,020,000	1,020,001	0.835	1.432	2.148	12,850	16,158	3,308	25.74%
8	(1) Multi-Family	129	1.25%	22.03	14.32	65.01%	129,000	387,000	1,290,000	1,290,001	0.835	1.432	2.148	16,174	20,386	4,212	26.04%
9	(1) Multi-Family	153	1.41%	22.03	14.32	65.01%	153,000	459,000	1,530,000	1,530,001	0.835	1.432	2.148	18,998	24,075	5,077	26.72%
10																	
11	(1) Units Served times Monthly Minimum for 5/8 Inch Meter							44,000									
12								132,000									
13	Difference between Bill Count Revenues																
14	and General Ledger Revenues													6,311	8,141	1,830	29.00%
15	Miscellaneous Revenues													10,532	10,532	-	0.00%
16	Total Revenues													441,506	569,791	128,284	29.06%
17																	
18	Totals Water Sales		100.00%														
19																	

20 **Rate of Return at Present Rates From Cost of Service Study (Using ACC Staff Plant & Expenses)**

21

22 Meter Size -->	5/8" x 3/4"	1"	1 1/2"	2"	3"	4"
23 Rate of Return at Present Rates:	1.67%	79.23%		70.19%	33.91%	52.83%

24

25 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
26 **(b)** Percent of Computed Monthly Minimum
27 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
28 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12, Page 1.
29 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
30 **(f)** For Multi-family, consolidation factors are the residential consolidation factors at 33% & 67% multiplied by families served.
31 **(1)** 1 1/2 Inch Meter Tier computed as 1 Inch tier divided by 50 gpm, and Multiplied by 100 gpm. 6, & 8 Inch Commercial Meter Tiers computed as 3 Inch tier divided by 320 gpm, multiplied by 1000, & 1,600 gpm, respectively.

Arizona American - Havasu Water
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001
Going from Summer & Winter Commdity Rate to Year Round Rate

Rate Schedule Summary
Three Tier Rates
Bill Comparison

Line No.	Customer Classification and/or Meter Size		(a) Average Number of Customers at 12/31/01	Average Consumption	Summer Revenues Present Rates	Summer Revenues Proposed Rates	Summer Proposed Increase Dollar Amount	Summer Proposed Increase Percent Amount	Winter Revenues Present Rates	Winter Revenues Proposed Rates	Winter Proposed Increase Dollar Amount	Winter Proposed Increase Percent Amount
1	5/8 Inch Residential		1,082	7,659	$ 19.46	$ 23.50	4.04	20.77%	$ 18.72	$ 23.50	4.77	25.49%
2	1 Inch Residential		0	569,250	824.02	1,240.67	416.65	50.56%	761.51	1,240.67	479.16	62.92%
3	1.5 Inch Residential											
4	2 Inch Residential		1	166,833	269.08	422.32	153.23	56.95%	250.84	422.32	171.48	68.36%
5	3 Inch Residential		-	-	45.60	131.49	85.89	188.36%	45.60	131.49	85.89	188.36%
6	4 Inch Residential		1	291,500	470.11	832.38	362.27	77.06%	438.16	832.38	394.23	89.97%
7	6 Inch Residential											
8	5/8 Inch Commercial		33	22,384	40.37	46.37	6.01	14.89%	38.01	46.37	8.36	21.99%
9	1 Inch Commercial		5	68,625	113.13	129.17	16.04	14.18%	105.69	129.17	23.48	22.22%
10	2 Inch Commercial		2	76,793	141.23	198.48	57.26	40.54%	132.89	198.48	65.59	49.36%
11	3 Inch Commercial		4	489,810	739.71	832.90	93.19	12.60%	685.94	832.90	146.96	21.42%
12	4 Inch Commercial		1	192,833	330.00	537.75	207.74	62.95%	308.90	537.75	228.85	74.08%
13	6 inch Commercial											
14	Multi-Family 44	1"	1	160,250	605.08	744.01	138.94	22.96%	592.29	744.01	151.73	25.62%
15	Multi-Family 56	2"	1	117,917	647.92	774.10	126.18	19.47%	641.11	774.10	132.99	20.74%
16	Multi-Family 64	4"	1	208,583	845.31	956.23	110.92	13.12%	829.40	956.23	126.82	15.29%
17	Multi-Family 65	2"	1	161,083	786.44	918.73	132.29	16.82%	775.87	918.73	142.86	18.41%
18	Multi-Family 67	4"	1	305,250	1,008.32	1,125.48	117.16	11.62%	982.11	1,125.48	143.37	14.60%
19	Multi-Family 89	1"	1	256,000	1,127.14	1,287.55	160.41	14.23%	1,108.77	1,287.55	178.78	16.12%
20	Multi-Family 102	2"	1	134,167	1,065.68	1,342.66	276.98	25.99%	1,062.14	1,342.66	280.52	26.41%
21	Multi-Family 129	4"	1	170,500	1,348.93	1,698.75	349.82	25.93%	1,344.37	1,698.75	354.39	26.36%
22	Multi-Family 153	4"	1	192,000	1,585.38	2,006.27	420.89	26.55%	1,581.09	2,006.27	425.18	26.89%
23												
24												
25	Totals		1,138									
26												
27	Actual Year End Number											
28	of Customers:		1,189									
29												
30	**(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.											
31												
32												

Arizona / American Mohave Water
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates
Page 1

Rejoinder Revenue Requirement 4,536,491
Computed Revenues, from Proposed Rates 4,535,179

Percent Increase over Present Rates **3.21%**

Line No.		Present Monthly Minimums	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) 33.00% Tier One Break-Point	(c) 67.00% Tier Two Break-Point	Tier Three Break-Point	(d) 70% Tier One Rate	(d) 120% Tier Two Rate	(d) 180% Tier Three Rate	Present Revenue	Proposed Revenue	Dollar Increase	Percent Increase
1	Residential																
2	5/8 Inch	$ 8.65	61.88%	$ 16.38	$ 10.65	65.02%	0	4,000	12,000	12,001	$ 0.678	$ 1.163	$ 1.744	2,698,132	2,770,379	72,247	2.68%
3	1 Inch	15.00	0.42%	$ 29.34	19.07	65.00%	0	4,000	12,000	12,001	0.678	1.163	1.744	16,698	18,358	1,659	9.94%
4	1 1/2 Inch	25.00	0.00%	$ 50.93	33.10	64.99%	0	4,000	12,000	12,001	0.678	1.163	1.744	-	-	-	
5	2 Inch	30.00	0.43%	$ 76.84	49.95	65.01%	0	4,000	12,000	12,001	0.678	1.163	1.744	13,257	13,705	449	3.38%
0.98	Residential Multi-Family							33.00%	67.00%	(Residential Consolidation Factors times number of families served.)							
1.98	5/8 Inch (1)	$ 8.65	1.69%	$ 16.38	$ 10.65	65.02%	1,000	4,000	12,000	12,001	$ 0.678	$ 1.163	$ 1.744	92,538	93,540	1,002	1.08%
2.98	1 Inch (1)	8.65	0.87%	$ 16.38	10.65	65.02%	1,000	4,000	12,000	12,001	0.678	1.163	1.744	44,945	44,926	(19)	-0.04%
3.98	1 1/2 Inch (1)	8.65	0.18%	$ 16.38	10.65	65.02%	1,000	4,000	12,000	12,001	0.678	1.163	1.744	15,946	17,760	1,813	11.37%
4.98	2 Inch (1)	8.65	3.97%	$ 16.38	10.65	65.02%	1,000	4,000	12,000	12,001	0.678	1.163	1.744	234,403	242,100	7,697	3.28%
5.98	4 Inch (1)	8.65	0.30%	$ 16.38	10.65	65.02%	1,000	4,000	12,000	12,001	0.678	1.163	1.744	17,645	18,818	1,172	6.64%
6.98	6 Inch (1)	8.65	2.22%	$ 16.38	10.65	65.02%	1,000	4,000	12,000	12,001	0.678	1.163	1.744	152,270	158,400	6,129	4.03%
7.98	Rio Water Residential							33.00%	67.00%								
8.98	5/8 Inch	7.75	2.18%	$ 16.38	$ 10.65	65.02%	0	4,000	12,000	12,001	$ 0.678	$ 1.163	$ 1.744	83,249	82,678	(571)	-0.69%
9.98	1 Inch	7.75	0.00%	29.34	19.07	65.00%	0	4,000	12,000	12,001	0.678	1.163	1.744	314	384	70	22.33%
11	2 Inch	7.75	0.00%	76.84	49.95	65.01%	0	4,000	12,000	12,001	0.678	1.163	1.744	286	737	451	158.08%
12	Commercial							70.00%									
13	5/8 Inch	$ 8.65	3.57%	$ 16.38	$ 10.65	65.02%	0	31,000	31,001		$ 1.163	$ 1.744		127,514	136,382	8,867	6.95%
14	1 Inch	15.00	2.66%	29.34	19.07	65.00%	0	37,000	37,001		1.163	1.744		93,752	98,409	4,657	4.97%
15	1 1/2 Inch	25.00	0.94%	50.93	33.10	64.99%	0	112,000	112,001		1.163	1.744		28,828	29,557	729	2.53%
16	2 Inch	30.00	11.66%	76.84	49.95	65.01%	0	148,000	148,001		1.163	1.744		366,265	389,851	23,586	6.44%
17	3 Inch	60.00	1.61%	137.31	89.25	65.00%	0	487,000	487,001		1.163	1.744		54,701	57,555	2,853	5.22%
18	4 Inch (2)																
19	6 Inch (2)																
20	8 Inch (2																
21	10 Inch (2																
22	Commercial Multi-Unit							70.00%	(Consolidation Factor from 5/8 Inch Commercial Meter, Times Number of Units Served)								
23	5/8 Inch (1)	$ 8.65	0.34%	$ 16.38	$ 10.65	65.02%	1,000	31,000	31,001		$ 1.163	$ 1.744		20,393	20,396	4	0.02%
24	1 Inch (1)	8.65	0.04%	$ 29.34	10.65	65.02%	1,000	31,000	31,001		1.163	1.744		3,056	3,419	363	11.86%
25	1 1/2 Inch (1)	8.65	0.09%	$ 50.93	10.65	65.02%	1,000	31,000	31,001		1.163	1.744		2,619	2,344	(275)	-10.49%
26	2 Inch (1)	8.65	0.23%	$ 76.84	10.65	65.02%	1,000	31,000	31,001		1.163	1.744		6,541	6,018	(523)	-7.99%
27																	
28	Computed Charge Per 1,000 Gallons of Water				$ 0.96900												
29																	
30	Present Charge Per 1,000 Gallons of Water				$ 1.48		Mohave System										
31	Present Charge Per 1,000 Gallons of Water				$ 1.75		Rio System										
32																	

33 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
34 **(b)** Percent of Computed Monthly Minimums.
35 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
36 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12.
37 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
38 **(1)** Monthly Minimum for 5/8 Inch Meter multiplied by number of units served.
39 **(2)** Tiers for 4, 6, 8 & 10 Commercial Inch meters computed as tier from 2 inch Commercial meter divided by 160 gpm multiplied by 500, 1,000, 1,600 & 2,300 gpm, respectively.

Arizona / American Mohave Water
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates
Page 2

Line No.		Present Monthly Minimums	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) Tier One Break-Point	(c) Tier Two Break-Point	(b) 120% Tier One Rate	(b) 180% Tier Two Rate	Present Revenue	Proposed Revenue	Dollar Increase	Percent Increase
1	Public Authority														
2	5/8 Inch	$ 8.65	0.07%	$ 16.38	$ 10.65	65.02%	0	467,000	467,001	$ 1.163	$ 1.744	4,450	4,857	407	9.14%
3	1 Inch	15.00	0.15%	29.34	19.07	65.00%	0	467,000	467,001	1.163	1.744	5,153	4,856	(298)	-5.78%
4	1 1/2 Inch	25.00	0.10%	50.93	33.10	64.99%	0	467,000	467,001	1.163	1.744	3,877	3,924	47	1.20%
5	2 Inch	30.00	1.89%	76.84	49.95	65.01%	0	467,000	467,001	1.163	1.744	60,154	61,402	1,249	2.08%
6	3 Inch	60.00	0.57%	137.31	89.25	65.00%	0	467,000	467,001	1.163	1.744	15,446	15,844	398	2.57%
7	4 Inch	90.00	0.73%	223.69	145.40	65.00%	0	467,000	467,001	1.163	1.744	19,694	20,889	1,195	6.07%
8	6 Inch	200.00	1.20%	439.63	285.76	65.00%	0	467,000	467,001	1.163	1.744	33,295	36,600	3,305	9.93%
9	Total Water Sold		100.00%												
10															
11	Private Fire														
12	2 Inch or smaller			$ 3.00	$ 3.10							396	409	13	3.33%
13	4 Inch			6.00	6.20							4,554	4,706	152	3.33%
14	6 Inch			9.00	9.30							1,620	1,674	54	3.33%
15	8 Inch			12.00	12.40							720	744	24	3.33%
16	10 Inch			15.00	15.50							180	186	6	3.33%
17	12 Inch			18.00	18.60										
18	14 Inch			21.00	21.70										
19	20 Inch			30.00	31.02										
20				-	-										
21	Per Sprinkler Head			0.51	0.53										
22	Per each Private Fire Hydrant			7.64	7.89							14,489	14,963	474	3.27%
23	Difference between														
24	Bill Count Revenue and														
25	General Ledger Revenue											48,141	49,805	1,664	3.46%
26	Miscellaneous Revenues											108,705	108,705	-	0.00%
27	Total Revenues											4,394,228	4,535,277	141,049	3.21%
28															

29 **Rate of Return at Present Rates From Cost of Service Study (Using ACC Staff Plant & Expenses)**

30

31	Meter Size -->	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
32	Rate of Return at Present Rates:	13.55%	0.00%	23.24%	29.19%	14.99%	31.64%	-2.80%	-5.78%	-5.57%	-5.45%

33

34 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
35 **(b)** Percent of Computed Monthly Minimums.
36 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
37 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12, Page 1.
38 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
39 **(1)** Monthly Minimum for 5/8 Inch Meter multiplied by number of units served.
40 **(2)** Tiers for 4, 6, 8 & 10 Commercial Inch meters computed as tier from 2 inch Commercial meter divided by 160 gpm multiplied by 500, 1,000, 1,600 & 2,300 gpm, respectively.

Arizona / American Mohave Water
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001

Rate Schedule Summary
Three Tier Rates
Bill Comparison

Line No.	Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Number of Units at 12/31/01	Average Consumption Per Customer	Weighted Average Consumption Per Unit	Revenues Per Customer Present Rates	Revenues Per Customer Proposed Rates	Revenues Per Unit Present Rates	Revenues Per Unit Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	Residential 5/8 Inch	11,933	11,933	7,500	7,500	18.27	17.43	18.27	17.43	(0.84)	-4.58%
2	Residential 1 Inch	29	29	21,141	21,141	88.42	92.65	88.42	92.65	4.23	4.78%
3	Residential 1.5 Inch										
4	Residential 2 Inch	10	10	62,308	62,308	120.74	124.82	120.74	124.82	4.09	3.38%
5										-	
6	Residential Muti-family 5/8 Inch	178	578	13,801	4,241	43.76	43.01	13.45	13.21	(0.75)	-1.72%
7	Residential Muti-family 1 Inch	38	262	33,048	4,787	98.49	97.02	14.27	14.05	(1.47)	-1.49%
8	Residential Muti-family 1.5 Inch	4	133	71,750	1,983	366.69	409.94	10.13	11.33	43.25	11.80%
9	Residential Muti-family 2 Inch	108	1,641	53,220	3,496	189.71	192.80	12.46	12.66	3.08	1.63%
10	Residential Muti-family 4 Inch	2	107	216,583	4,048	731.83	751.37	13.68	14.04	19.54	2.67%
11	Residential Muti-family 6 Inch	1	757	1,920,929	4,175	7,008.36	7,250.19	11.78	12.05	241.82	3.45%
12											
13	Rio Water Residential 5/8 Inch	264	264	11,942	11,942	25.15	22.60	25.15	22.60	(2.55)	-10.14%
14	Rio Water Residential 1 Inch	0	0	12,501	12,501	26.13	31.96	26.13	31.96	5.83	22.33%
15	Rio Water Residential 2 Inch	0	0	11,000	11,000	23.50	60.80	23.50	60.80	37.30	158.74%
16											
17	Commercial 5/8 Inch	378	378	13,691	13,691	27.43	26.57	27.43	26.57	(0.86)	-3.14%
18	Commercial 1 Inch	135	135	28,529	28,529	55.74	52.25	55.74	52.25	(3.49)	-6.27%
19	Commercial 1.5 Inch	16	16	85,344	85,344	149.83	146.41	149.83	146.41	(3.42)	-2.28%
20	Commercial 2 Inch	163	163	103,576	103,576	181.81	170.41	181.81	170.41	(11.40)	-6.27%
21	Commercial 3 Inch	15	15	153,110	153,110	285.12	267.32	285.12	267.32	(17.81)	-6.24%
22											
23	Commercial Multi-Unit 5/8 Inch	20	86	25,526	5,822	69.33	71.37	15.81	16.28	2.04	2.95%
24	Commercial Multi-Unit 1 Inch	5	22	12,339	2,800	49.86	56.16	11.31	12.74	6.30	12.63%
25	Commercial Multi-Unit 1.5 Inch	1	5	123,250	24,650	218.26	190.77	43.65	38.15	(27.49)	-12.59%
26	Commercial Multi-Unit 2 Inch	3	37	126,781	9,263	293.04	283.01	21.41	20.68	(10.03)	-3.42%
27											
28	Public Authority 58 Inch	27	27	3,731	3,731	12.69	14.99	12.69	14.99	2.30	18.10%
29	Public Authority 1 Inch	8	8	27,158	27,158	53.71	50.65	53.71	50.65	(3.06)	-5.70%
30	Public Authority 1.5 Inch	5	5	27,767	27,767	64.61	65.39	64.61	65.39	0.78	1.20%
31	Public Authority 2 Inch	37	37	74,826	74,826	139.26	136.97	139.26	136.97	(2.29)	-1.64%
32	Public Authority 3 Inch	1	1	830,167	830,167	1,287.17	1,265.73	1,287.17	1,265.73	(21.43)	-1.67%
33	Public Authority 4 Inch	1	1	1,050,083	1,050,083	1,642.64	1,705.42	1,642.64	1,705.42	62.77	3.82%
34	Public Authority 6 Inch	1	1	1,740,583	1,740,583	2,774.58	3,050.01	2,774.58	3,050.01	275.43	9.93%
35											
36	Private Fire 2 Inch	7	7	-	-	3.00	3.10			0.10	3.33%
37	Private Fire 4 Inch	63	63	-	-	6.00	6.20	6.00	6.20	0.20	3.33%
38	Private Fire 6 Inch	14	14	-	-	9.00	9.30	9.00	9.30	0.30	3.33%
39	Private Fire 8 Inch	4	4	-	-	12.00	12.40	12.00	12.40	0.40	3.33%
40	Private Fire 10 Inch	1	1	-	-	15.00	15.50	15.00	15.50	0.50	3.33%
41	Private Fire Hydrant	158	158	-	-	7.64	7.89	7.64	7.89	0.25	3.27%
42											
43	Subtotal	13,628	16,896								
44											
45	Actual Year End Number										
46	of Customers:	13,795	17,315								
47											

48 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Arizona American - Sun City
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates
Page 1 / Revised

Rejoinder Revenue Requirement	10,666,506
Computed Revenues, from Proposed Rates	10,665,755

Percent Increase over Present Rates 72.60%

Line No.		Present Monthly Minimums	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	Gallons Included In Minimum	(b) Percent of Computed Monthly Minimums	(c) 33.00% Tier One Break-Point	(c) 67.00% Tier Two Break-Point	Tier Three Break-Point	(d) 70% Tier One Rate	(d) 120% Tier Two Rate	(d) 180% Tier Three Rate	Present Revenue	Proposed Revenue	Dollar Change	Percent Change
1	Residential Rates:																
2	5/8 Inch	$ 5.00	41.73%	$ 17.21	$ 11.19	0	65.02%	6,000	27,000	27,001	$ 0.778	$ 1.334	$ 2.002	2,673,198	4,563,520	1,890,322	70.71%
3	3/4 Inch	5.00	0.03%	21.64	14.07	0	65.02%	6,000	27,000	27,001	0.778	1.334	2.002	1,817	3,462	1,645	90.53%
4	1 Inch	13.00	1.18%	30.49	19.82	0	65.00%	6,000	27,000	27,001	0.778	1.334	2.002	66,902	114,892	47,990	71.73%
5	1 1/2 Inch	28.00	25.13%	52.63	34.21	0	65.00%	6,000	27,000	27,001	0.778	1.334	2.002	1,486,167	2,543,351	1,057,184	71.13%
6	2 Inch	41.00	10.14%	79.20	51.48	0	65.00%	6,000	27,000	27,001	0.778	1.334	2.002	638,283	1,106,719	468,436	73.39%
7	3 Inch	70.00	0.25%	141.19	91.77	0	65.00%	6,000	27,000	27,001	0.778	1.334	2.002	13,103	25,683	12,580	96.01%
8	4 Inch	103.00	0.00%	229.74	149.33	0	65.00%	6,000	27,000	27,001	0.778	1.334	2.002			-	
9	6 Inch	141.00	0.07%	451.14	293.24	0	65.00%	6,000	27,000	27,001	0.778	1.334	2.002	6,383	13,244	6,860	107.47%
10	8 Inch			774.15	503.20	0	65.00%	6,000	27,000	27,001	0.778	1.334	2.002			-	
11																	
12	Computed Charge per 1,000 gallons of Wate	**$1.112000**															
13																	
14	**Tier 1 Present Rate**			$ 0.73													
15	**Tier 2 Present Rate**			$ 0.92													
16																	
17								(c) 60.00%									
18			Percent	Computed	Proposed	Gallons	Percent of	Tier One	Tier Two		120% Tier One	180% Tier Two		Present	Proposed	Dollar	Percent
19			of Water	Monthly	Monthly	Included In	Computed Monthly	Break-Point	Break-Point		Rate	Rate		Revenue	Revenue	Change	Change
20	Commercial Rates:		Sales	Minimums	Minimums	Minimum	Minimums										
21	5/8 Inch	$ 5.00	0.36%	$ 17.21	$ 11.19	0	65.02%	19,000	19,001		$ 1.334	$ 2.002		26,361	54,017	27,656	104.91%
22	3/4 Inch	5.00	0.05%	21.64	14.07	0	65.02%	30,000	30,001		1.334	2.002		3,156	7,034	3,877	122.84%
23	1 Inch	13.00	0.73%	30.49	19.82	0	65.00%	69,000	69,001		1.334	2.002		48,540	79,006	30,466	62.76%
24	1 1/2 Inch	28.00	2.18%	52.63	34.21	0	65.00%	69,000	69,001		1.334	2.002		151,756	236,327	84,571	55.73%
25	2 Inch	41.00	4.84%	79.20	51.48	0	65.00%	137,000	137,001		1.334	2.002		285,530	462,127	176,597	61.85%
26	3 Inch	70.00	1.23%	141.19	91.77	0	65.00%	226,000	226,001		1.334	2.002		68,419	112,406	43,986	64.29%
27	4 Inch	103.00	1.55%	229.74	149.33	0	65.00%	993,000	993,001		1.334	2.002		71,802	123,108	51,306	71.46%
28	6 Inch	141.00	4.52%	451.14	293.24	0	65.00%	2,296,500	2,296,501		1.334	2.002		203,846	358,126	154,280	75.68%
29	8 Inch (1)			774.15	-	0	0.00%	3,674,400	3,674,401								
30																	
31	Irrigation Rates:										120%	180%					
32	1 Inch	$ 13.00	0.00%	$ 30.49	$ 19.82	0		5,286,000	5,286,001		$ 1.334	$ 2.002		339	518	179	52.66%
33	1.5 Inch	28.00	1.95%	52.63	34.21	0		5,286,000	5,286,001		1.334	2.002		98,005	168,488	70,482	71.92%
34	2 Inch	41.00	0.19%	79.20	51.48	0		5,286,000	5,286,001		1.334	2.002		5,563	11,024	5,462	98.18%
35	3 Inch	70.00	0.01%	141.19	91.77	0		5,286,000	5,286,001		1.334	2.002		1,045	1,522	477	45.65%
36	6 Inch	141.00	3.73%	451.14	293.24	0		5,286,000	5,286,001		1.334	2.002		197,300	534,579	337,279	170.95%

37 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
38 **(b)** Percent of computed monthly minimum
39 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
40 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12.
41 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
42 **(1)** Tier for 8 Inch Commercial Meter computed as tier from 6 Inch Meter divided by 1,000 gpm, multiplied by 1,600 gpm.

Arizona American - Sun City
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates
Page 2 / Revised

Line No.				Proposed Monthly Minimums	Tier One Break-Point	Tier Two Break-Point	120% Tier One Rate	180% Tier Two Rate	Present Revenue	Proposed Revenue	Dollar Change	Percent Change
1	Public Interruptible											
2	3 Inch	Zero	0.14%	zero	1,048,000	1,048,001	$ 1.334	$ 2.002	-	0		
3	8 Inch	Zero	0.00%	zero	1,048,000	1,048,001	1.334	2.002	19	51	32	166.80%
4	Fire Protection											
5	3 Inch	$ 6.00		$ 10.80					72	130	58	80.00%
6	4 Inch	9.00		16.20					5,940	10,692	4,752	80.00%
7	6 Inch	12.50		22.50					7,350	13,230	5,880	80.00%
8	8 Inch	20.00		36.00					2,400	4,320	1,920	80.00%
9	10 Inch	30.00		54.00								
10	Standby	3.50		6.30					2,646	4,763	2,117	80.00%
11	Miscellaneous Revenues								113,419	113,419	-	0.00%
12									6,179,363	10,665,755	4,486,392	72.60%
13												
14	Total Revenues											
15												
16	Totals Water Sales	100.00%										
17												

18 **Rate of Return at Present Rates From Cost of Service Study (Using ACC Staff Plant & Expenses)**

19

20 Meter Size -->	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"
21 Rate of Return at Present Rates:	-3.92%	-2.95%	5.95%	11.21%	8.43%	9.97%	-2.65%	3.42%	-6.75%

22

23 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
24 **(b)** Percent of computed monthly minimum
25 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
26 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12, Page 1.
27 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
28 **(1)** Tier for 8 Inch Commercial Meter computed as tier from 6 Inch Meter divided by 1,000 gpm, multiplied by 1,600 gpm.

Arizona American - Sun City
Test Year Ended December 31, 2001
Analysis of Revenue by Detailed Class at Average Usage

Rate Schedule Summary
Three Tier Rates
Bill Comparison

Line No.	Customer Classification and/or Meter Size		(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch	Residential	19,214	8,361	$ 11.17	$ 19.01	7.84	70.13%
2	3/4 Inch	Residential	8	15,869	18.08	31.90	13.82	76.46%
3	1 Inch	Residential	117	38,788	47.17	76.10	28.94	61.35%
4	1.5 Inch	Residential	1,312	73,721	94.30	160.43	66.12	70.12%
5	2 Inch	Residential	425	91,864	123.99	214.02	90.02	72.60%
6	3 Inch	Residential	3	321,194	363.98	713.43	349.45	96.01%
7	4 Inch	Residential	-	-	-	-	-	0.00%
8	6 Inch	Residential	2	137,292	$ 265.79	$ 546.73	280.94	105.70%
9	5/8 Inch	Commercial	198	7,054	10.15	20.60	10.45	102.97%
10	3/4 Inch	Commercial	21	-	-	-	-	0.00%
11	1 Inch	Commercial	126	22,247	31.95	49.50	17.55	54.94%
12	1.5 Inch	Commercial	181	46,341	69.11	96.03	26.92	38.94%
13	2 Inch	Commercial	155	120,339	150.19	212.01	61.82	41.16%
14	3 Inch	Commercial	23	204,111	256.26	364.05	107.79	42.06%
15	4 Inch	Commercial	5	1,190,450	1,196.69	1,869.29	672.59	56.20%
16	6 Inch	Commercial	7	2,486,155	2,426.74	3,736.46	1,309.72	53.97%
17	1 Inch	Irrigation	2	77	13.05	19.92	6.87	52.66%
18	1.5 Inch	Irrigation	117	64,318	13.05	19.92	6.87	52.66%
19	2 Inch	Irrigation	1	613,500	13.05	19.92	6.87	52.66%
20	3 Inch	Irrigation	1	27,462	13.05	19.92	6.87	52.66%
21	4 Inch	Irrigation	-	-	-	-	-	0.00%
22	6 Inch	Irrigation	1	10,762,250	7,136.46	18,308.22	#######	156.54%
23	3 Inch	Public Interruptible	1	491,154	245.58	655.20	409.62	166.80%
24	8 Inch	Public Interruptible	1	3,167	1.58	4.22	2.64	166.80%
25	3 Inch	Fire Protection	1	-	6.00	10.80	4.80	80.00%
26	4 Inch	Fire Protection	54	-	9.00	16.20	7.20	80.00%
27	6 Inch	Fire Protection	48	-	12.50	22.50	10.00	80.00%
28	8 Inch	Fire Protection	10	-	20.00	36.00	16.00	80.00%
29	10 Inch	Fire Protection	-	-	-	-	-	0.00%
30	Standby		63	-	3.50	6.30	2.80	80.00%
31								
32		Totals	22,098					
33								
34		Actual Year End Number						
35		of Customers:	22,195					
36								

37 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.
38
39

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates
Page 1

Rejoinder Revenue Requirement 4,540,361
Computed Revenues, from Proposed Rates 4,540,058

Percent Increase over Present Rates **34.90%**

Line No.		Present Monthly Minimums	Percent of Water Sales	(a) Compute Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) 33.00% Tier One Break-Point	(c) 67.00% Tier Two Break-Point	Tier Three Break-Point	(d) 70% Tier One Rate	(d) 120% Tier Two Rate	(d) 180% Tier Three Rate	Present Revenue	Proposed Revenue	Dollar Increase	Percent Increase
1	Residential Rates:																
2	5/8 Inch	$ 5.00	60.97%	$ 13.03	$ 8.47	65.00%	0	4,000	12,000	12,001	$0.724	$1.242	$1.863	2,078,864	2,775,367	696,503	33.50%
3	3/4 Inch	$ 5.00	0.02%	17.02	11.06	64.98%	0	4,000	12,000	12,001	0.724	1.242	1.863	409	631	222	54.17%
4	1 Inch	$ 13.00	1.04%	25.00	16.25	65.00%	0	4,000	12,000	12,001	0.724	1.242	1.863	40,107	52,435	12,328	30.74%
5	1 1/2 Inch	$ 28.00	15.96%	44.95	29.22	65.01%	0	4,000	12,000	12,001	0.724	1.242	1.863	511,337	717,175	205,838	40.25%
6	2 Inch	$ 41.00	4.35%	68.89	44.78	65.00%	0	4,000	12,000	12,001	0.724	1.242	1.863	162,039	221,507	59,468	36.70%
7	3 Inch	$ 70.00	0.00%	124.74	81.08	65.00%	0	4,000	12,000	12,001	0.724	1.242	1.863	-	-	-	
8	4 Inch	$ 103.00	5.07%	204.54	132.95	65.00%	0	4,000	12,000	12,001	0.724	1.242	1.863	117,032	194,126	77,094	65.87%
9	6 Inch	$ 141.00		404.03	262.62	65.00%	0	4,000	12,000	12,001	0.724	1.242	1.863				
10	8 Inch			696.25	452.56	65.00%	0	4,000	12,000	12,001	0.724	1.242	1.863				
11																	
12	Computed Charge per 1,000 gallons of Water				**$ 1.03490**												
13																	
14	**Tier 1 Present Rate**			$ 0.93													
15	**Tier 2 Present Rate**			$ 1.12													

Line No.		Present Monthly Minimums	Percent of Water Sales	(a) Compute Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) 60.00% Tier One Break-Point	Tier Two Break-Point	120% Tier One Rate	180% Tier Two Rate	Present Revenue	Proposed Revenue	Dollar Increase	Percent Increase
16															
17															
18															
19															
20	Commercial Rates:														
21	5/8 Inch	$ 5.00	0.25%	$ 13.03	$ 8.47	65.00%	0	13,000	13,001	$1.242	$1.863	9,326	14,513	5,188	55.63%
22	3/4 Inch	$ 5.00	0.00%	17.02	11.06	64.98%	0			1.242	1.863	-	-	-	
23	1 Inch	$ 13.00	1.09%	25.00	16.25	65.00%	0	32,000	32,001	1.242	1.863	33,715	45,308	11,594	34.39%
24	1 1/2 Inch	$ 28.00	2.29%	44.95	29.22	65.01%	0	86,000	86,001	1.242	1.863	75,359	94,814	19,455	25.82%
25	2 Inch	$ 41.00	6.71%	68.89	44.78	65.00%	0	161,000	161,001	1.242	1.863	214,510	272,899	58,389	27.22%
26	3 Inch	$ 70.00	1.68%	124.74	81.08	65.00%	0	626,500	626,501	1.242	1.863	47,070	61,339	14,269	30.31%
27	4 Inch	$ 103.00	0.45%	204.54	132.95	65.00%	0	404,000	404,001	1.242	1.863	11,618	16,027	4,409	37.95%
28	6 Inch	$ 141.00	0.14%	404.03	262.62	65.00%	0	193,000	193,001	1.242	1.863	4,923	7,118	2,195	44.59%
29	8 Inch			696.25	452.56	65.00%	0	3,132,500	3,132,501						
30	Totals Water Sales		100.00%												
31															

32 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
33 **(b)** Percent of Computed Monthly Minimum
34 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
35 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12.
36 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
37 **(1)** 8 Inch Commercial Meter Tiers computed as 3 Inch tier divided by 320 gpm, multiplied by 1,600 gpm

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates
Page 2

Line No.		Present Monthly Minimums	Proposed Monthly Minimums	Present Revenue	Proposed Revenue	Dollar Increase	Percent Increase
1							
2	General Fire Sprinkler						
3	4 Inch	30.00	40.50	4,680	6,318	1,638	35.00%
4	6 Inch	45.00	60.75	11,880	16,038	4,158	35.00%
5	8 Inch	60.00	81.00	5,040	6,804	1,764	35.00%
6	10 Inch	120.00	162.00				
7							
8	Miscellaneous Revenues			37,640	37,640	-	0.00%
9	Total Revenues			3,365,549	4,540,058	1,174,510	34.90%
10							

11 **Rate of Return at Present Rates From Cost of Service Study (Using ACC Staff Plant & Expenses)**
12

13	Meter Size -->	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"
14	Rate of Return at Present Rates	1.95%	14.26%	10.77%	27.10%	17.98%	29.79%	55.38%	-9.10%	-11.85%

15
16 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
17 **(b)** Percent of Computed Monthly Minimum
18 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
19 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12, Page 1.
20 **(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.
21 **(1)** 8 Inch Commercial Meter Tiers computed as 3 Inch tier divided by 320 gpm, multiplied by 1,600 gpm

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Analysis of Revenue by Detailed Class at Average Usage

Rate Schedule Summary
Three Tier Rates
Bill Comparison

Line No.	Customer Classification and/or Meter Size		(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch	Residential	14,463	7,171	$ 11.67	$ 15.30	3.64	31.15%
2	3/4 Inch	Residential	1	27,333	34.09	52.46	18.36	53.87%
3	1 Inch	Residential	115	15,429	28.76	35.47	6.71	23.33%
4	1.5 Inch	Residential	460	59,042	92.61	129.69	37.08	40.04%
5	2 Inch	Residential	134	55,342	101.46	138.36	36.90	36.36%
6	3 Inch	Residential	-	-	-	-	-	0.00%
7	4 Inch	Residential	1	8,617,167	9,752.71	16,177.21	6,424.50	65.87%
8	5/8 Inch	Commercial	73	5,736	10.33	15.59	5.26	50.89%
9	3/4 Inch	Commercial	-	-	-	-	-	0.00%
10	1 Inch	Commercial	66	28,108	42.96	51.16	8.20	19.09%
11	1.5 Inch	Commercial	69	56,383	89.63	99.25	9.62	10.73%
12	2 Inch	Commercial	117	97,766	148.98	166.21	17.23	11.56%
13	3 Inch	Commercial	15	185,076	275.76	310.94	35.18	12.76%
14	4 Inch	Commercial	1	773,833	968.17	1,323.72	355.54	36.72%
15	6 Inch	Commercial	1	241,750	410.24	593.15	182.91	44.59%
16		Construction						
17	4 Inch	Fire Protection	12	-	8.00	11.94	3.94	49.25%
18	6 Inch	Fire Protection	22	-	30.00	44.78	14.78	49.27%
19	8 Inch	Fire Protection	7	-	45.00	67.18	22.18	49.29%
20	10 Inch	Fire Protection			120.00	179.14	59.14	49.28%
21		Totals	15,555					
22								
23		Actual Year End Number						
24		of Customers:	15,581					
25								

26 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.
27
28

Arizona American - Tubac
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates

Rejoinder Revenue Requirement 436,436
Computed Revenues, from Proposed Rates 436,401

Percent Increase over Present Rates **71.95%**

Line No.		Present Rates	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) 33.00% Tier One Break-Point	(c) 67.00% Tier Two Break-Point	Tier Three Break-Point	(d) 70% Tier One Rate	(d) 120% Tier Two Rate	(d) 180% Tier Three Rate	Present Revenue	Proposed Revenue	Dollar Increase	Percent Change
1	Residential Rates:																
2	5/8 Inch	$ 15.35	78.79%	$ 43.77	$ 28.45	65.00%	0	6,000	17,000	17,001	$ 1.664	$ 2.853	$ 4.280	193,116	319,125	126,009	65.25%
3	3/4 Inch	$ 15.35	4.16%	59.04	38.38	65.01%	0	6,000	17,000	17,001	1.664	2.853	4.280				
4	1 Inch	$ 23.00	0.60%	89.59	58.23	65.00%	0	6,000	17,000	17,001	1.664	2.853	4.280	11,709	23,166	11,457	97.85%
5	1 1/2 Inch	$ 46.00	0.48%	165.95	107.87	65.00%	0	6,000	17,000	17,001	1.664	2.853	4.280	1,501	2,994	1,493	99.46%
6	2 Inch	$ 76.00	0.06%	257.59	167.43	65.00%	0	6,000	17,000	17,001	1.664	2.853	4.280	1,671	3,302	1,631	97.57%
7	3 Inch	$ 90.00	0.00%	471.41	306.42	65.00%	0	6,000	17,000	17,001	1.664	2.853	4.280	1,255	4,133	2,879	229.42%
8	4 Inch	$ 132.00		776.86	504.96	65.00%	0	6,000	17,000	17,001	1.664	2.853	4.280				
9	6 Inch	$ 180.00		1,540.51	1,001.33	65.00%	0	6,000	17,000	17,001	1.664	2.853	4.280				
10	8 Inch	N/A		2,557.43	1,662.33	65.00%	0	6,000	17,000	17,001	1.664	2.853	4.280				
11																	
12	Computed Charge per 1,000 gallons of Water				**$ 2.3775**												
13																	
14	**Tier 1 Present Rate**			$ 1.66													
15	**Tier 2 Present Rate**			$ 2.04													

Line No.		Present Rates	Percent of Water Sales	(a) Computed Monthly Minimums	Proposed Monthly Minimums	(b) Percent of Computed Monthly Minimums	Gallons Included In Minimum	(c) 70.00% Tier One Break-Point	Tier Two Break-Point	(d) 120% Tier One Rate	(d) 180% Tier Two Rate	Present Revenue	Proposed Revenue	Dollar Increase	Percent Change
16															
17															
18															
19															
20	Commercial Rates:														
21	5/8 Inch	$ 15.35	7.18%	$ 43.77	$ 28.45	65.00%	0	11,000	11,001	$ 2.853	$ 4.280	20,794	38,431	17,637	84.82%
22	3/4 Inch	$ 15.35	2.76%	59.04	38.38	65.01%	0			2.853	4.280				
23	1 Inch	$ 23.00	1.05%	89.59	58.23	65.00%	0	32,000	32,001	2.853	4.280	7,323	15,035	7,712	105.32%
24	1 1/2 Inch	$ 46.00	4.74%	165.95	107.87	65.00%	0	37,000	37,001	2.853	4.280	2,753	5,211	2,458	89.29%
25	2 Inch	$ 76.00	0.17%	257.59	167.43	65.00%	0	115,500	115,501	2.853	4.280	9,544	18,066	8,522	89.30%
26	3 Inch	$ 90.00		471.41	306.42	65.00%	0	27,500	27,501	2.853	4.280	1,609	4,547	2,939	182.69%
27	4 Inch (1)	$ 132.00		776.86	504.96	65.00%	0	360,938	360,938	2.853	4.280				
28	6 Inch (1)	$ 180.00		1,540.51	1,001.33	65.00%	0	721,875	721,875	2.853	4.280				
29	8 Inch (1)	N/A		2,557.43	1,662.33	65.00%	0	1,155,000	1,155,000						
30	Miscellaneous Revenues											2,691	2,691	-	0.00%
31	Total Revenues											253,964	436,701	182,736	71.95%
32															
33	Totals Water Sales		100.00%												
34															

35 **(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.
36 **(b)** Percent of Computed Monthly Minimums.
37 **(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.
38 **(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12.
39 **(e)** All water sales for construction, resale, and non-general meters customers will be billed at highest tier plus monthly minimum.
40 **(1)** Tiers for 4, 6 & 8 Commercial Inch meters computed as tier from 2 inch Commercial meter divided by 160 gpm multiplied by 500, 1,000 & 1,600 gpm, respectively..

Arizona American - Tubac
Test Year Ended December 31, 2001
Proposed Rates

Rate Schedule Summary
Three Tier Rates
Page 2

Line No.							
1							
2	**Rate of Return at Present Rates From Cost of Service Study (Using ACC Staff Plant & Expenses)**						
3							
4	Meter Size -->	5/8" x 3/4	3/4"	1"	1 1/2"	2"	3"
5	Rate of Return at Present Rates:	2.04%	0.00%	-0.40%	2.67%	6.73%	-4.06%
6							
7							
8							
9							
10							
11	**(a)** Computed Monthly Minimums are from Cost of Service Study in Rebuttal Phase, which used ACC Staff's Plant and Expenses.						
12	**(b)** Percent of Computed Monthly Minimums.						
13	**(c)** Tiers set at percent of consolidation factor. Percent amount above this column is percent of consolidation factor.						
14	**(d)** Percent of "Computed Charge per 1,000 gallons" on Line 12, Page 1.						
15	**(e)** All construction Water, sales for resale & non-general metered customers will be billed at highest tier rate, plus monthly minimum.						
16	**(1)** Tiers for 4, 6 & 8 Commercial Inch meters computed as tier from 2 inch Commercial meter divided by 160 gpm multiplied by 500, 1,000 & 1,600 gpm, respectively..						

Arizona American - Tubac
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001

Rate Schedule Summary
Three Tier Rates
Bill Comparison

Line No.	Customer Classification and/or Meter Size		(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch	Residential	401	13,177	$ 39.19	$ 58.91	19.72	50.31%
2	1 Inch	Residential	18	15,301	51.17	94.75	43.58	85.15%
3	1.5 Inch	Residential	1	40,250	125.07	248.75	123.68	98.89%
4	2 Inch	Residential	1	32,500	139.26	275.14	135.88	97.57%
5	3 Inch	Residential	1	-	-	-	-	0.00%
6								
7	5/8 Inch	Commercial	53	9,090	30.85	54.38	23.53	76.26%
8	1 Inch	Commercial	10	19,172	59.07	112.93	53.86	91.17%
9	1.5 Inch	Commercial	2	35,167	114.70	208.20	93.50	81.52%
10	2 Inch	Commercial	2	159,167	397.66	683.84	286.18	71.97%
11	3 Inch	Commercial	1	22,833	133.54	371.56	238.02	178.24%
12								
13		Totals	490					
14								
15		Actual Year End Number						
16		of Customers:	494					
17								

18 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.
19
20